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THE NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO THE
BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

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Looking Forward

CONGRESS meets early this month. Several types of bills relating to federal aid for public education will probably be introduced by certain groups who are making this problem their chief effort during the current year.

From one standpoint these requests for further aid represent a continuation of the federal policy of making grants to public education that began in 1787. From another point of view they also represent the development of a new policy and a new relationship between the federal government and the states with respect to education. Whatever the angle of approach, this question deserves careful objective scrutiny by educational leaders throughout the country. A heavy emotional appeal will be created in support of these several programs. It seems desirable therefore to review briefly and objectively some of the implications and tendencies.

THE United States is face to face with the Age of Power and its attendant implications and possibilities. There are three roads to follow. One continues the numerous tendencies toward industrial feudalism or what is more familiarly known now as fascism. The second turns toward the left with collectivism as the goal. The third path, leading toward industrial and social democracy, might be called the American plan.

As its major outlines become fairly discernible, there are many obvious differences between the American plan and the extreme right and left tendencies. Essentially it is merely extending to

society as a whole protection from buccaneering in financial and industrial sectors just as such protection has been provided progressively in the past against other dangers that menaced social stability. Within these rational limits of control there will be greater freedom, greater opportunity and a far more equitable distribution of income. Only those types of restrictions will be desirable that prevent any individual or group from disturbing the social safety. The integrity and the freedom of the individual within these limits of social safety will be greater than before. The future will be thoroughly in accord with our cultural tradition and in harmony with our social discipline.

CONTINUATION and development of the American tradition hinge chiefly on one major factor. Local government must be reorganized along rational sociologic and political lines and must be carefully rebuilt as the primary unit in our general plan. This need is somewhat at variance with recent general tendencies and with much talk by leaders in education and other fields. We have been looking more and more to the federal government to provide corrections for local inadequacies and local faults. Moreover, many persons say that local government has failed and that it is hopeless to expect anything further from it. The next appeal is to the state. Many persons also feel that the state has failed and that nothing further may be expected from it.

Finally, the only apparent possibility seems to be the federal government. The reasoning is somewhat as follows: Comparatively, the federal government has been cleaner, more efficient and generally more capable than local government.

Local political controls make change difficult if not impossible. As a decentralized nation, we are not in a favorable position in comparison with continental countries. We cannot secure unified action quickly enough. There is too much differentiation and sectional diversity. Therefore, let us place our hopes in the federal government. All of these assumptions and conclusions might easily and logically be questioned. One might argue just as easily that the superiority of the federal government is just a reflex of our better local government. Local government has not failed everywhere. Chicago and New York do not represent the entire country. Much of our local government is actually very good.

* * *

The fundamental fact remains that continuity of the democratic tradition is possible only insofar as we are able to rebuild local government. Regardless of rhyme, logic or reason, our legal territorial units, the states, are so deeply grounded in our tradition and practice that it will be a long, long time before they are eliminated. Interests may develop gradually that will produce voluntary sectional associations and a more natural grouping of legal territorial units. Even that is a long distance away.

While operating under certain general principles, a democratic social order must be fairly self-sufficient and independent in the interpretation of these principles and must make full provision for individual differences and for localities. There is no sane reason for standardization on some specific type or model. Sections of this country are too widely differentiated by natural geographic and climatic conditions to make a single mold reasonable even if it were desirable. A democratic social order must be a dynamic one, providing for freedom on the part of the individual to experiment, to change and to promote change without penalty. The individual within our cultural pattern must be fairly self-sufficient. He must be able to think clearly, to see his individual and social problems; he must be willing to meet these needs intelligently and cooperatively.

Without a successful, well integrated and generally capable and self-governing primary social unit, we cannot rise ultimately much above the effectiveness of the primary group except under an autocratic pattern. The reconstruction of local government and the training of the individual to meet these responsibilities is fundamentally important. The solution of our political problem lies in doing the job locally instead of turning our faces to the central government in an attitude of wishing and yearning.

IN THE maintenance and

development of the democratic tradition the public school becomes the principal agency. It is the vital integrating force through which the best of our cultural heritage is handed on and the means through which the socialization of the child takes place. The school of the future must be vastly different from the school of the past and the present. It must be more closely integrated with the active and cultural patterns, functioning as a living social laboratory rather than as a segregated, devitalized, timid and frequently sterile agency.

In addition to the training of the youth, the public school must also provide more fully in the future for the redirection and rehabilitation of the adult. We cannot accept the implications of a completely planned social organization because no one knows exactly what it will be or should be and even if we possessed such omniscient vision we could not proceed faster than the ability of the people to follow. Our social order must remain dynamic. This consideration eliminates the possibility of complete planning and crystallization at any given stage. Sudden and unforeseen economic changes will force adults, in the future as in the past, to redirect their lives. The school must be ready to salvage and reeducate individuals and groups so affected.

Increasing leisure threatens the safety of the social order unless this extra time can be intelligently directed along constructive lines. The future industrial order will offer little opportunity for the individual to express himself. Opportunities for creative expression will be developed outside of work through the schools and other educational agencies. In fact, the school of the future will be the dynamic social and political center of all community activity and expression.

THE hope for a continu-

ity of democratic tradition and practice lies fundamentally in the vision and dynamic qualities of our educational institutions. In that general category the public schools represent one of the major elements. Since freedom to differentiate, to change and to grow is a fundamental condition, it gives us a clew to ultimate organization. Admitting freely the lack of value in complete standardization with its accompanying constrictions for a nation the size and type of ours, there is further consideration respecting the general plan. Any centralized plan, no matter how intelligently conceived and faultlessly organized in its initial stages, tends in practice, because of natural administrative difficulties and institutional lethargy,

to follow ultimately the line of least resistance and to become static in attitude and routinized in procedure. Experience has shown that the greater the degree of centralization the greater the ease in control and the greater the tendency toward the static.

WHILE it may not be entirely just to assume that federal subsidy to public education would mean the complete removal of the schools from popular control, the fact remains that in the last analysis finance always controls major policies indirectly and subtly, if not openly. Regardless of theoretical consideration, it is much easier to influence one legislative body than it is to control forty-eight. Congress is much too far removed from the people to determine regional public school policy. Those specific educational activities now actually conducted by the federal government are not in any respect superior either in management or functioning to our better city school systems. If anything, they are considerably more conventionalized. There is social safety in decentralization.

The American fetish worship of the great idols of "administration" and "centralized control" would be humorous if it were not so pitiful. Any trend toward partial or complete federalization of public education through policy control with its natural restricting tendencies and the development of unwieldy bureaucratic machines represents a grave danger for public education and the democratic state. There is no inherent merit in centralization beyond the state as the responsible educational unit. Even within the state central control should be limited to general planning and appraisal, allowing the plan to be administered by logically organized local areas. Planning naturally includes the furnishing of adequate finance. Control must always be retained close to the people, by states and by districts. The school must be considered as the big functional unit in the reconstruction and maintenance of local government. Any other concept and practice is fraught with too much risk.

THE present question of securing federal interest lies in the field of finance. The schools have been terribly crippled by the depression and they do not seem to be pulling themselves out of the bog very rapidly. Local districts are helpless and many states are apparently doing little. Therefore, the federal government must "save" the schools. This brings up the question of whether federal aid is necessary. We are prone

during periods of discouragement to become emotional and to seek a quick escape from our difficulty rather than to work out the problem as it really exists.

There is little hope for public education and many other governmental functions until we erase the traditional and extravagant forms of local civil and educational government that have come to us from the horse and buggy age. We cannot afford that extravagance. The now generally dominant organization of administrative units must be changed. So long as the farmers are permitted to exploit rural education as one of their cash crops through employing inadequately trained teacher-daughters and so maintain small inefficient schools, there is little value in pouring more money into a situation of this kind. It offers no cure.



Our method of financing schools and other governmental functions must also change. The entire theory and practice of taxation must be shifted to meet the conditions of the Age of Power. Revenue from real property should be progressively decreased and such depression expedients as retail sales and nuisance taxes should be completely eliminated. Income and inheritance taxes, revenue and license taxes will bear the big burden in the future. Taxation must be reorganized so that it will not penalize mass consumption. If centralized collection could be substituted for current political collection of taxes, the revenue saved in each state would by itself go a long way in the support of education.

It is quite natural to expect that each state must bear an increasing share of the tax burden for public education and for local civil government as well. Can the states do so without handicapping or eliminating other essential activities? With the possible exception of ten or twelve states, the answer must be in the affirmative. To do so, however, means that local government and finance must undergo the changes mentioned and there must be a reevaluation of existing activities. There must be popular education on the subject and dynamic public opinion must be created in those states. It will not happen simply because we wish it.

If we are too puny, powerless or lacking in courage to convince the people in our own community and in our own state of the value and need of popular education in opposition to political speculative and predatory fiscal and industrial interests, is it rational to assume that emotional ballyhoo will accomplish the fact nationally? Not for very long.

THE great danger with federal aid at present is that, if given, it will not help the future very much but will merely meet an emergency. It will have the tendency to fasten upon each state for another generation the present inadequate organization and poorly balanced tax systems. Federal aid will not stir to local action but will enable the professional politicians to continue current inefficient and expensive governmental methods to provide sustenance for the "regular workers." It will tend to place a premium on inefficiency unless some requirements are set up for this aid. And the setting up of requirements means federal domination of policy which is ultimately undesirable. It is a most difficult question. I firmly believe that the solution lies initially with the profession. We must make up for past deficiencies, faults and inertia by meeting the problem squarely. Unless we can convince our friends and neighbors and our fellow citizens in each state of the actual need for public education, there is little real hope in the future.

THERE remains, however, the question of the emergency. The people in each state can solve this problem if they will to do so. Every legislature can be kept in session by public opinion to solve the question immediately by reorganizing its administrative practices, modifying its tax program and reevaluating its existing activities. In a nutshell, let the federal government build the roads. Devote the major part of these state appropriations to education and the problem will be met. This is the point at which the attack should be made rather than at the federal government.

Notwithstanding the foregoing facts, the federal government can be of tremendous emergency aid to public education in many ways without raising the issue of control. The most signal service now possible would be for the administration to speak out clearly for the schools, not as they were or are today but as they must be in the future. Public education needs moral support at present just as much as it needs finance. Since the public works program has a definite terminus with respect to control, it would be entirely feasible to make complete grants for new buildings and for renovation and upkeep of existing buildings. It might well provide the pattern and stimulus for much more comprehensive planning than states have heretofore considered. It might provide help to carry the internal debt burden upon the promise that sins of this type would be no more. Relief from current debt obligation would enable

many districts to carry their current programs on the 1929 basis. Finally, if plans now developing actually mature in the next congress, a general per capita distribution might be made to the states for public education solely as an emergency measure without any strings except a nominal audit to determine that these funds had not been used for another purpose.

IF WE face the problem objectively in the light of all its implications, we gradually reach the conclusion that safeguarding of the democratic tradition depends on the degree of success with which we can reconstruct the primary social unit. Admission of local and state shortcomings without attempting to rebuild merely marks the beginning of the last chapter in our democratic tradition. The national government ultimately will be no better than its primary units. We are too large and too diverse for standardization even if that were desirable. The public school must be the center around which these primary social units are fashioned. It must safeguard and develop the democratic tradition. It must protect and safeguard the sanctity of personality and the freedom of the individual. It should be diversified, not standardized. I believe this work may best be accomplished if the schools remain free from federal domination.

ONE of the disturbing factors in current living is the gradual development of individual and social "jitters." There appears to be a decreasing tolerance for the other man's view.

Certain projected political movements may attempt in the near future to revive deeply rooted and only slightly veneered racial and religious conflict in this country. The German fascist movement cleverly curtained its movements by its anti-Jewish propaganda. A parallel movement in this country may consider the use of similar patterns. While spasms of intolerance in the United States have been short-lived in the past, there is no guarantee regarding what the future may hold. The public schools should take direct cognizance of conditions and lay increasing stress in teaching on the need for a broader tolerance. Let us be forewarned against contingencies and strive above all to develop and maintain in both children and adults a closer understanding of, sympathy for and appreciation of our neighbor and his beliefs. We cannot afford anything else.

The Editor

A Glimpse Into the Future of School Administration

By M. M. CHAMBERS, Ohio State University, Columbus

PROGRESS often occurs with surprising swiftness. The vague ideal of yesterday becomes the commonplace of today, but today's newly formed vision of future possibilities is likely to be but a blurred impression.

No one ever perceives the picture of any department of civilization as it will be ten years hence in all its completeness of detail. The mosaic will be composed of many segments, some of which are being inserted firmly and accurately in their places even now, while others will be thrust in tardily at the last moment. A few will be embedded so skillfully as to serve well for many years, but many will be set so clumsily as to necessitate almost immediate supplanting.

School Enrollment Will Increase

The administration of public education is unquestionably a social project of first rank. What are some of the steps in its evolution that lie within the realm of practicability and of probability during the ensuing decade? The following guesses are the result of a combination of wishful thinking, intuition and study of existing conditions. They are put in positive form for the sake of achieving brevity and avoiding tiresome equivocation. The reader will therefore excuse the semblance of cocksureness and dogmatism.

The 25,000,000 persons now enrolled in the schools of the United States will be increased by several millions, despite a sharp fall in the birth rate which is already effecting a reduction of enrollments in the first few grades. The increase will be due to several factors, including the growth of preschools, the retention of a larger proportion of all adolescent youth by the high schools and junior colleges and a great expansion of continuation schools and agencies of adult education.

There will be a tendency to raise the age of compulsory education to a minimum of eighteen years in all states and at the same time to mitigate the rigors of compulsion by an increasing recognition of the dignity and worth of every pupil as an individual in his own right. New Jersey's statutory prohibition of corporal punishment of pupils will

be adopted by other states. Textbooks and supplies will probably be furnished free to all pupils.

Pupils and parents alike will be permitted and encouraged to make wider use of school facilities as community centers and to draw upon the intellectual resources of teachers in the solution of individual and social problems.

Two years of formal education beyond the traditional high school will become the minimum qualification for certification to teach in any school in any state. Some states will require a bachelor's degree for teaching in elementary schools and California's requirement of the master's degree for secondary school teaching will be adopted in other states. Many doctors of philosophy will teach in secondary schools and candidates without the doctor's degree will scarcely be considered for administrative or teaching positions in universities and colleges, including teachers' colleges. Separate standards for the certification of public school administrators will tend to make the doctorate in educational administration prerequisite to service in superintendencies and principalships.

Teachers' tenure laws now existing in nearly half the states will spread to others and will become of statewide application in cases where they are now limited to large cities. Teachers' retirement and pension systems will also cover the United States. The tendency of legislatures to require oaths of allegiance of teachers and to establish compulsory patriotic rigmarole in the schools will diminish. Instead, legislation designed to protect the schools from the propaganda of various pressure groups may make its appearance.

One-Room Schools Will Die Out

Prejudice against married women as teachers will decrease as the proportion of working wives grows in all pursuits.

The theory of independent self-government for every locality within the state, already exploded, will approach the vanishing point. The necessity for larger administrative units, already obvious from the standpoints of school support, instructional efficiency and social service, will hasten the extinction of the one-room school. Many states

will enact permissive or mandatory laws making the county the smallest unit for rural schools, as West Virginia did in 1933. In other states a trained full-time fiscal officer in each county will supplant the many part-time clerks of local boards.

The county superintendency of schools will increase in usefulness and prestige and will tend to be filled by men of respectable education and experience rather than by petty local politicians. To this end the office will be made appointive by the county board of education, without regard to the residence of candidates but with minimum educational and professional qualifications prescribed.

The chief state school officer, now elected by the people in a majority of the states, will be appointed by the state board of education, as is already the case in ten states. The nine state boards of education now consisting wholly of ex officio state officers will disappear but the forty-two state boards of education now in existence will probably increase in number. The new type of board will consist of about seven members either popularly elected or appointed by the governor for long and overlapping terms.

The demand for a federal department of education headed by a cabinet member, long unsuccessful, may give way to a movement for a national board of education consisting of several members appointed by the president for long and overlapping terms. This board would head the department of education as an independent establishment and would appoint the commissioner of education and deliberate upon the policies of the department.

States Will Change Tax Systems

Federal subsidies for education in the states will increase in volume for an increasing proportion of the taxable wealth of the nation continues to pass into the control of organizations whose activities are worldwide and which can be efficiently and equitably taxed by no governmental unit smaller than the federal government. The practice of earmarking federal subsidies for special types of education will probably diminish and tend to be superseded by a policy of granting aid to the states "with no strings attached." This will include the abolition of the "matching" of funds by the state.

Interstate and regional plans for a proper distribution of institutions offering the rarer types of professional and technical higher education will be encouraged by the U. S. Office of Education and aided by surveys conducted at the expense of congress. The idea of a great national university, first conceived by the founding fathers, may come into being as an institution for postdoctoral students.

The fundamental trend toward larger units for taxing purposes will make an increasing propor-

tion of school support the obligation of the state as a whole. Other states will assume the entire cost of a minimum program of education as did North Carolina in 1931. An intermediate step in some states will be the appropriation of substantial sums, much larger than heretofore, in aid of all local school districts without regard to their wealth.

The collapse of the general property tax as the sole or principal source of school support will be increasingly recognized and one by one the states will turn to higher inheritance taxes, income taxes, taxes on intangibles and selective and general sales taxes.

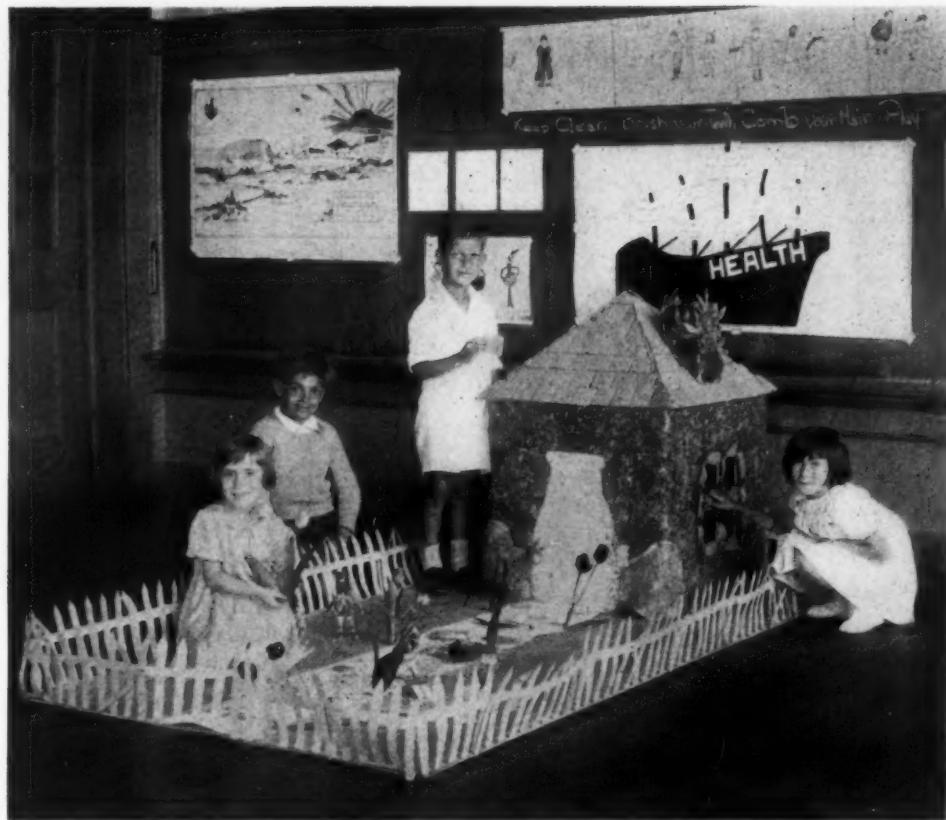
Public school systems and state institutions of higher education will receive subsidies from the great private foundations in larger aggregate than heretofore and will also become in increasing measure the recipients of gifts and bequests from other private donors.

Fundamentals for All Teachers

The field of "external" educational administration, above the level of institutional management, now comparatively neglected by educators and political scientists, will attract more research effort. The legal basis of education, school administration as a problem of the state and the nation and comparative studies of educational administration in all countries will come into their own.

The methods and techniques of the mathematical and physical sciences will continue to contribute to the advancement of educational administration but clumsy adaptations of these devices to situations wherein their use is not fruitful may be expected to decrease. Historical and philosophical methods may be drawn upon to a greater extent than at present and school administration will be identified with the social sciences, in recognition of its intimate relations with government, sociology, economics and law. The development of these liaisons will proceed as an essential antidote for the *reductio ad absurdum* of myopic minute specialization and as an indispensable step toward the synthesizing of knowledge which common sense requires.

Educational sociology and educational law will be recognized as fundamentals for all teachers, not merely as narrow specialties belonging exclusively to school executives and supervisors. The science of school administration will not lose sight of the fact that the teacher is the one factor in the advancement of education before which all others pale into relative insignificance. Personnel administration in the schools, now suffering a temporary recession from its ideals, will be the subject of devoted and productive research and practice in the next decade.



A trip to Health Land. Boys and girls in the Lincoln School, Huntington, Long Island, N. Y., are taught the value of good health. The posters on the wall, the little house with its "milk bottle" door and its fenced in garden are important factors in showing the children the road to health.

Pupil Personnel—Two Major Problems

By RAYMOND C. BURDICK, Superintendent of Schools,
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THE administration of pupil personnel requires careful solution of the attendance problem as well as complete and accurate information regarding the child from the time he enters school until he leaves. Complete records for each pupil should be on file in the school.

We must know his behavior in the home, in society and in the school. We must have information regarding his mental and physical ability. We must know definitely his vocational pursuits and desires. In other words, we need to give boys and

girls both educational and vocational guidance in order to direct them into the right channels of life. Unless we find the proper place for every individual child and develop his capacity to the fullest, the problem of solving the activities of pupils will be difficult.

School attendance is always a difficult problem. In the past there have been overemphasis of law enforcement and lack of emphasis on the educational effects of nonattendance. In order to maintain an efficient attendance program, it is necessary to secure the cooperation of parents, teachers and pupils. Truancy is often the result of a misunderstanding between school authorities, parents and children. The underlying cause of this misunderstanding should be uncovered and a better relationship established.

Child accounting, if properly carried out, begins with the birth of the child and continues until his eighteenth birthday. There should be a complete

check on the child every school day so that there is no loss of time. Records in the central office should be complete and up-to-date. A continuing census record, checked at least once a week, will do much to carry out such a policy. This record should include the birth certificate and the correct address of each child. It must show where the child is placed in school every day. As children move from district to district transfer cards should be supplemented by information received by telephone. In the past school authorities have neglected to notify the attendance officer promptly and the follow-up has caused a waste of time. All superintendents and principals should cooperate to see that the principal of the school where the child is entering is properly notified.

Qualifications for Attendance Officer

A daily check-up on the part of the attendance officer is an important factor in holding up standards of attendance. The principal should notify the central office by telephone about any suspicious cases and the attendance officer in turn should make prompt and thorough investigation. The attendance officer is the keystone of the attendance problem. He is the contact man between the public and the schools. He should have a sympathetic understanding of human nature and the ability to adjust cases with a spirit of helpfulness and at the same time with a firm hand. He should possess character with a sincere purpose. He should never use arbitrary methods but should always conduct preliminary hearings and try to solve cases without court proceedings.

He should be a high school graduate under sixty years of age. Either through training or experience he should have a thorough education in psychology, sociology and social hygiene. The position should never be given purely for charitable reasons. In other words, many attendance officers who lack knowledge of child problems are placed in the position through political patronage and not through merit. The principle of civil service should apply here.

Census taking is another important phase of the attendance problem. It has been the custom in the schools of Watertown, N. Y., to use two half-days of the elementary teachers' time in order to make a house to house canvass of the pupils. The purpose of this is twofold. In the first place it gives an opportunity to develop a cooperative attitude between the schools and the home. Thus the teacher gains firsthand information of the home and learns how to work with the children more sympathetically. In the second place it has been a splendid economy measure since it saves the cost of census enumerators. Census is usually

taken the second week of September so that it does not materially interfere with school routine.

There should always be a clear-cut understanding regarding causes of tardiness and absence. Parents should be constantly reminded that illness or death in the family, inclement weather, impassable roads, quarantine, religious observance and presence required in court are the only legal excuses for absence. In other words, parents should understand that when a child is absent from school because he is out of town or because he lacks shoes or clothing, he is suffering an injustice.

Delinquency is the most serious problem that confronts the attendance officer. His relationship to the court must be one in which he enjoys the fullest cooperation. The courts should always aim to make a thorough study of each case. This can be done only when the attendance officer has made a thorough investigation. Before he brings any action on a case he should learn whether the fault rests with the home or with the child and should then proceed accordingly, always giving the fairest consideration to the child.

The best type of school in which to place delinquent boys and girls is one that has not become overinstitutionalized. Jefferson Farm School at Watertown has developed a thorough program of character training and outdoor life for boys. They are kept happy in their work and they are given certain routine duties to keep them busy and to divert their minds from their troubles. Boy Scout troops, drum corps and 4-H Clubs do much to overcome truancy. Many boys have returned to the public schools and have ceased to be behavior problems after receiving training in the farm school. Criminal tendencies are overcome and boys are directed in the right channels by such schools. The continuation school also aids in correcting child delinquency and in adjusting the child to school.

Health Program Is Essential

There should be a close tie-up between the health department and the attendance department. In determining the illness of children the attendance department should obtain the cooperation of the health department. In cases about which the attendance officer is uncertain he should call in the school nurse or the school doctor.

Physical education should also be tied up with the health department. A thorough examination should be made by the health department before any child is allowed to participate in athletic games. All information should be forwarded to the physical training department so that a program for corrective work may be carried on for all physically defective pupils. This program



Arbor Day is a high spot for pupils in Woodbury School, Huntington, Long Island. The first graders (above) are planting shrubs, while at the right is a sixth grade clean-up squad.

should be based on individual case study of all pupils.

It has been well said that the health of children is more important than various other school activities. A well rounded health program is essential to the correct classification of children. Medical inspection under competent doctors and nurses is insufficient in itself. It must be the function of the medical corps to make a careful examination of every pupil and to see that every case of physical defect is followed up with corrective measures to put the child in good physical condition. This is also important in the case of the inspection of teeth. Oral hygienists may make thorough examinations but these are of no value unless the school dentist or hygienist makes provision to see that the teeth are taken care of properly.

In other words complete annual records should be kept of medical and dental inspections. These records should indicate whether or not everything has been done to correct the deficiencies. Health education is nothing more than taking remedial measures.

A problem closely akin to attendance and health of pupils is placement of children in classes. There are many mechanical means of classifying pupils. Annual or semiannual promotion, based on the principle that all children should be promoted regardless of ability or individual needs, does not meet the conditions of modern society. Ability



grouping of pupils is sometimes advocated. Ability grouping in X Y Z or A B C groups is better than the old lock step method, provided slow pupils are given a minimum course of study while average and better than average pupils are given extra work with an enriched curriculum. No grouping should ever be made until pupils have been checked by a good standardized intelligence test and a first class achievement test, followed by a recheck of all borderline cases.

There are many objectionable factors in this type of classification. In the first place, the average teacher in the average school system cannot develop a three-track course of study and make it successful. She might be able to use material supplied by the supervisor. In the second place, there is always danger of placing a stigma on pupils of lower intelligence, thus tending to develop inferiority complexes. In the third place, bright pupils are apt to develop superiority complexes and this would produce another problem.

The new philosophy of education provides that there shall be equal educational opportunity for

every child according to his ability. In the past the phrase, "according to his ability," has been left out of the educational program. We have attempted to mold children to one set pattern. Today we have learned that if we are to give equal educational opportunity we must give each child individual education adapted to his ability. In other words, we need to know more definitely the child's heredity, his mental make-up and the environmental conditions of the home. School records should show his intelligence quotient, his achievement quotient, his behavior characteristics, his desires and his tendencies, not in order to fit him into the

capped children and physically handicapped children should be given proper educational readjustment. In Watertown special classes are divided into two groups. One group consists of children ten to fourteen years old and the second group takes care of children fourteen to sixteen years old. Every child is given individualized work and classes are limited to twenty-two. Two groups of physically handicapped children receive instruction in the Jefferson County Sanatorium. The younger children are given instruction in the morning and the older children in the afternoon. Here again, the children are placed according to an in-



Pupils at Lincoln School, Huntington, L. I., receive good training from this "home" project.

group but in order to adapt a program to the child.

It is our purpose to set up a system of individual instruction that will take care of the child according to his mental age and his social chronological age. After we have learned all that can be found out regarding the child's ability, home conditions and physical defects we must set up in the schools a workshop where he can be fitted to become a better citizen. This cannot be done by placing an over age child in the lower grades, nor can it be done by placing an under age child in the upper grades. Children must be placed where they will react normally to the social group and it is my theory that the proper place is with those pupils of similar social chronological age.

Mentally slow pupils should be placed in special classes where individualized work can be carried on with some degree of success. Mentally handi-

individualized plan. Crippled children and others who are so physically handicapped that they cannot attend school are given individual instruction in their homes.

In order more closely to individualize the instruction of the elementary schools it has been our plan to place in charge of the school a teacher-coach who handles all individual problems where the teacher has a large number in the class. Only four or five pupils are permitted to go to the teacher-coach at one time. It is my firm belief that a psychiatrist should be placed in each school to act in the capacity of teacher-coach in order to develop this work. There is no reason why this same method cannot be carried into junior and senior high schools. Many times when pupils are absent from school the home room teacher does not have time to bring the child's work up to date. Here

again, the teacher-coach comes in to take care of the work.

Few schools can afford to develop a program of individual classification in the classroom. It is essential to have teachers of unusual ability to carry on this work successfully and the average school cannot afford to do it. It is necessary, therefore, to place in the various grades children of approximately the same social age and to give them through an activities program as much to do as their abilities permit. Teachers should constantly try to enrich the program of every child by planning extra activities. In other words, the brighter children should be given more work to do. However, the activities program should never replace certain fundamental work in reading, writing and arithmetic. Proficiency in these can come only through drill in the regular classroom and with the teacher-coach.

In his book, "The Individual Pupil," Dr. Paul Mort, says, "the problems in traditional schools that are characteristic of the elementary school continue through high school. Adjustments necessary in elementary school can, with minor changes, be applied to pupils in a junior and senior high school. There are similar problems of correcting deficiency, adjusting to low ability, and making adjustments required by unusual proficiency. . . . The fundamental attitude toward education in America expressed in the phrase 'equality of educational opportunity' has been one of the great influences in the development of public schools."

American education has changed its course. Textbook material is no longer the end in itself; it is only a tool to meet the end. The emphasis has been transferred from the teacher and her statistical data to the child. Society demands that every possible adjustment shall be made to place him in the niche where he can best serve society. It is the function of education to know the child's deficiency, his ability, his home environment, his physical condition and the place where he can best serve society.

Teacher Training in Arizona

By DOYLE D. JACKSON

Southern Arizona School for Boys, Tucson, Ariz.

A detailed and comprehensive study of teacher training and placement in Arizona revealed many interesting facts and exploded a number of traditional assumptions in connection with this subject.

The amount of training possessed by teachers in Arizona is considerably above the standards that have been widely accepted as satisfactory minimum standards of teacher training. More than three-fourths of all teachers in Arizona have attended school within four years. The

Arizona certification system tends to encourage an increased period of training in that no certificate granted is valid for a period of more than four years, and it can be renewed only upon proof of the completion of a prescribed amount of additional training. Arizona, on a comparative basis, is not facing any extensive rural school problem in her program of teacher training.

Arizona is not suffering from an oversupply of adequately trained teachers, that is to say, teachers adequately trained under the present law, which requires as a minimum the completion of a three-year college course for elementary school teachers and a four-year college course for high school teachers. Moreover, Arizona is not suffering from an oversupply of Arizona trained high school teachers. Of all the state's high school teachers only 44 per cent have ever enrolled for college work in an Arizona institution. It has been a westward movement on the part of American teachers that is largely responsible for Arizona's present problems of teacher placement.

Salaries of Teachers

The typical high school teacher of Arizona is a woman who is a graduate of some Middle Western or Western college, and who is entering her sixth year of teaching, but has taught only three and one-half years in her present position. Her median annual salary is \$1,943.33,¹ and she holds a secondary certificate which will expire at the end of four years from the date of issuance.

The typical grade school teacher of Arizona is a woman who has had two years of college training and six years of teaching experience, but who has been, on the average, three years in her present position. Her median annual salary is \$1,525, and she holds an elementary certificate which will expire at the end of four years from the date of issuance.

The typical rural school teacher of Arizona is a woman with two years of college training and five years of experience, but who has taught in her present position, on an average, a little less than two years. Her median annual salary is \$1,318.75, and she holds an elementary certificate which will expire at the end of four years from the date of issuance. All Arizona salaries have been reduced approximately 25 per cent during the depression period. These medians are based on contractual salaries of teachers for the year 1929-30.

Training Schools Function Independently

The teacher training institutions of the state do not represent a unified, cooperating system of teacher preparation. The three different units work independently of each other and compete for students and funds. Each school determines its own standards or scholarship and applies them in its own way. The Flagstaff and Tempe Schools offer differentiated curricula of sufficient number and variety to meet the demands made upon them.

The most conspicuous weakness of the teacher-training schools of Arizona is the lack of a general professional attitude in the academic departments. This criticism does not apply to the college of education at the University of Arizona as its entire offering is altogether professional. As at Flagstaff and at Tempe, the work of the college of education is in charge of well trained and experienced teachers, and is successfully meeting the demands made upon it by the state. Considering that the supply of teachers in Arizona is greater than the demand, the three placement offices are rendering an efficient service.

¹Jackson, Doyle D., Teacher Training and Placement in Arizona, University of Arizona Publication, 1933.

National Government Must Take Part in Financing Education

By PAUL R. MORT, Director, School of Education, Teachers College, Columbia University

THAT federal support for public education is inevitable must be the conclusion of anyone who will inspect the findings of the National Survey of School Finance.

Whatever the states may do in improving their local situations, the contrast between states when their own potentialities have been realized points to the absurdity of any stand that will place the complete responsibility for the support of education upon the states. Arkansas at the height of prosperity provided in the poorest districts a type of educational program that could be purchased for an annual expenditure of less than \$12 per pupil. New York at that time provided for its poorest districts a type of educational program that could be purchased for approximately \$78 per pupil.

That this contrast is not extreme may be readily seen from an inspection of Chart 1, which shows the extent of the minimum program provided in thirty-two states in the school year 1930-31. When it is realized that the length of these bars reflects in a very real degree the actual differences in the educational programs permitted in the states, the seriousness of the educational situation among the states becomes apparent.

Situation Analyzed in Thirty-Two States

Only those who have inspected the schools operated on these different levels have any conception of the contrast in opportunities afforded. The differences in these opportunities are differences in degree rather than in kind. In the better financed schools the whole stage is set to discover needs, interests and abilities of every boy and girl and to serve those needs. Well selected and highly trained teachers have their work supplemented by specialists who help them diagnose the physical, social and intellectual needs of their pupils and assist them in providing materials and activities to meet those needs.

As we pass from the better supported schools to the poorly supported schools we find fewer services established for the discovery and development of individual boys and girls. Children entering school fail to find the broader facilities for their transi-

tion from the life of the home into the life of the school. Schoolrooms are lacking in equipment and in the social, intellectual and artistic elements found in better supported schools. Teachers are less well prepared to understand the needs of boys and girls and are less well equipped with materials to use in meeting these needs. The most meager help is available to supplement their services on the physical side and little or no help is available on the intellectual side.

The National Survey of School Finance analyzed the situation in thirty-two states to discover the type of program toward which each of these states should work as a minimum objective. It is probable that under the best conditions the objective set for each state will not be attained in less than two decades. Yet when these desirable ends have been achieved the best to which Arkansas can look forward is the type of educational program that was purchased in 1924 for \$24 per pupil annually.

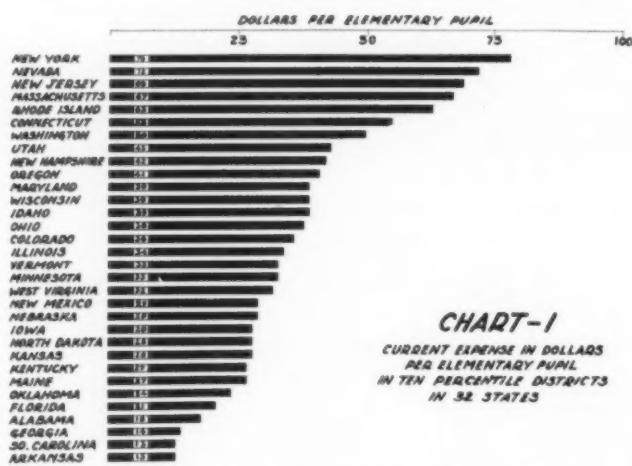


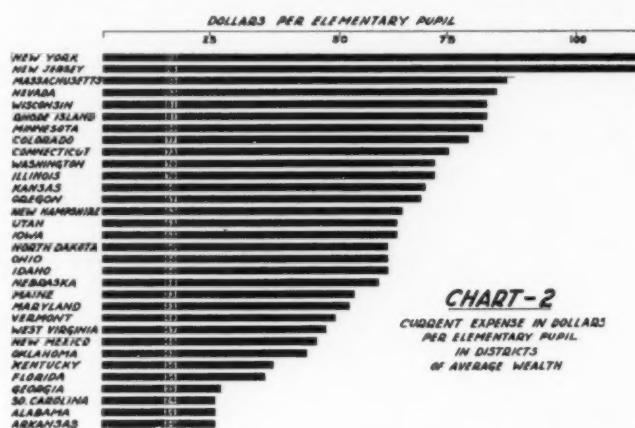
CHART-1

CURRENT EXPENSE IN DOLLARS
PER ELEMENTARY PUPIL
IN TEN PERCENTILE DISTRICTS
IN 32 STATES

This may be contrasted with the educational programs to which such states as New York, New Jersey and California may confidently aspire and which cost \$115 per pupil in 1930, or that to which Minnesota may aspire and which cost \$80 per pupil in 1930.

Chart 2 shows the minimum program to which the thirty-two states covered in the study may aspire. Even when differences in purchasing power of money are taken into consideration, the National Survey of School Finance demonstrates

clearly that the contrasts hold good not only with respect to present conditions but also with respect to the conditions that will exist when each of the states has faced its school finance problem squarely and provided educational opportunities in accordance with its reasonable abilities. This is shown by Chart 3 in which differences in amounts paid



for a given number of years of training and experience are taken into consideration.

In making this correction, the experience and training of the teachers in the poorer states are credited as equal in value to the same amount of training and experience in the abler states. Such an assumption doubtless favors the poorer states inasmuch as the comparisons in the school systems themselves are somewhat reflected in the teacher training institutions and in the provisions for supervision. In other words, Chart 3 tends to minimize the differences. In spite of this the expenditures to which the abler states may confidently aspire for their minimum programs have four times as much purchasing power as the expenditures to which the poorer states may aspire in this connection.

Government Must Assist

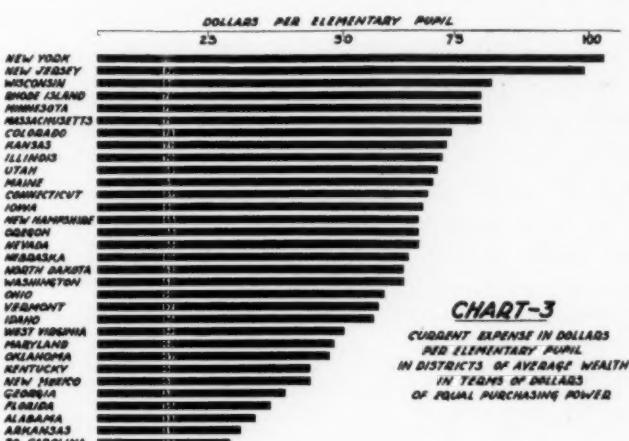
Can the American people look with equanimity upon such a situation? With the states doing the best that may be expected of them, the minimum conditions in the abler states would still be at least four times as extensive as those of the poorer states. Are we to be satisfied with the situation that will deny to vast groups of boys and girls the demands of the American ideal? The answer must obviously be no. The unsatisfactory nature of the state as the ultimate financing unit can no longer be glossed over by the excuse that if states were to put their own houses in order the educational situation would be corrected. The national government must take a hand in the financing of education.

But what about control, the bugaboo that has played so large a part in the thinking in this field

in recent years? A study of the report of the National Survey of School Finance will show that considerable headway has been made in laying this ghost. But even if this were not so, the facts reviewed clearly indicate that it is time for those honestly interested in the contributions of public education toward carrying out the great experiment in popular government, to face squarely the fact that national support must come and to work out ways and means by which this may be done. The time for academic discussion of this problem is past. What is needed now is a practical attack that will assume what is patently a fact—that the health of the public school system of America demands national support on an intelligent basis and at the earliest possible moment.

The Control Evil Can Be Avoided

Now that the nature of the steps that should be followed in the various states is understood we may readily see where national support may be introduced without involving controls. The necessary steps within the states are three in number: (1) equalization of the burden of the present minimum in each state regardless of the poverty of its minimum program; (2) expansion of the actual minimum until it attains the minimum which is reasonable for the state as indicated by Chart 2, and (3) in those states in which the reasonable minimum toward which the economic conditions of the state justify aspiration is lower than a rea-



sonable national standard, the further expansion of the state's minimum up to a national minimum.

Only a few states have taken the first step. Results of the National Survey of School Finance show that the typical situation within states requires the poorer 5 per cent of the districts to levy a tax rate from three to nine times as high as that required of the upper 5 per cent of districts. The poorest 5 per cent are typically required to carry from two to three times as heavy a burden as the districts of average wealth. In such states as New

York, Maryland, Delaware and North Carolina the burden of supporting the present minimum program is practically the same for all types of districts.

The elimination of these inequalities in tax rates involves only a redistribution of the burden. No control is necessarily involved even on the part of the state. The national government could supply the funds necessary for equalization without expanding the state minimum toward a more desirable level. As much as \$250,000,000 could be distributed to the states annually without involving expansion of the poorest program in the poorest state. The result would be a marked release of state and local funds.

The second step, unlike the first, involves new educational expenditure. This new educational expenditure is required to expand the programs in the poorer districts. The situation may be illustrated by Chart 4 which shows a distribution of expenditure among school districts in Arkansas in 1930-31. This chart is merely a succession of horizontal bars showing the expenditures per pupil in the various districts of the state arranged from the highest to the lowest expenditure districts. Using the 10 percentile districts as an index of lowest expenditure, we find the lowest expenditure to be at approximately \$12, while the highest is something over \$70. The desirable minimum as determined from financial conditions in Arkansas is at approximately \$24. This falls at about the 50 percentile as will be noted from the scale on the left.

Local Funds Could Be Used for Expansion

It is obvious that the result of bringing the minimum program in Arkansas up to the \$24 level will be an increase of the expenditure for approximately half of the pupils in the state. This increase will vary from \$12 in the districts of lowest expenditure to only a few dollars in the districts which now approach the \$24 level.

If state or national money were substituted for the money now used by the locality in supporting the minimum program—a \$12 program in the case of Arkansas—the locality could then use this amount to expand, to some extent at least, the present inadequate program. As these minimum programs were expanded the actual minimum program equalized within the state could be raised and again federal funds could be used. These in turn would relieve state and local funds for further expansion until an adequate minimum was reached.

This situation would be reached for Arkansas when the minimum level within the state had been raised to \$24. This is the best that may be expected of Arkansas without federal aid. With a substan-

tial amount of aid from the federal government for the support of such a program, however, the state would be able further to expand its minimum up to some nationally desirable minimum program. The process would be exactly the same as that described for expanding the present minimum up to the desirable state minimum program. In other words, state and national support would follow and take the place of support actually introduced by the communities on the basis of their own initiative. In every case it would be a refinancing of a program already in operation. By this process the

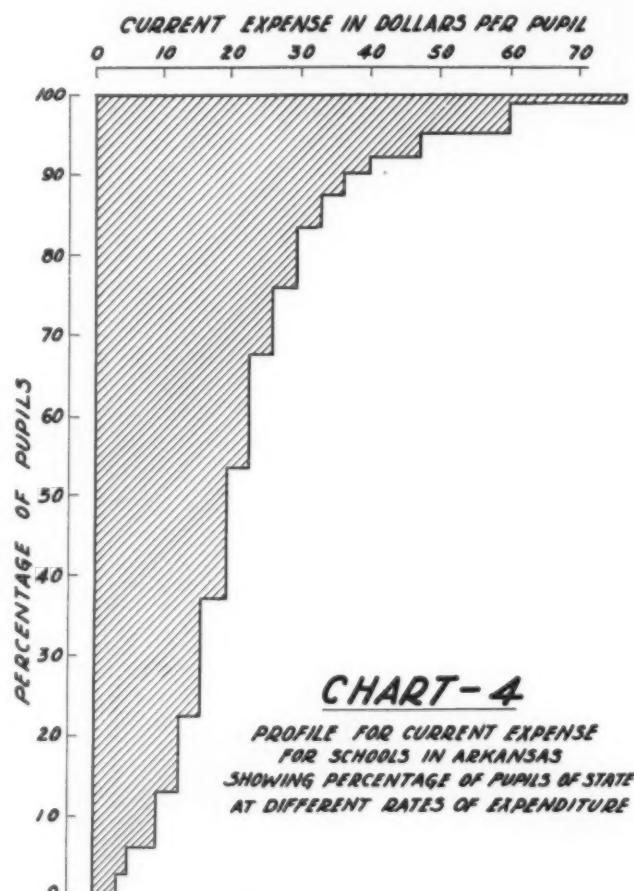


CHART - 4

**PROFILE FOR CURRENT EXPENSE
FOR SCHOOLS IN ARKANSAS
SHOWING PERCENTAGE OF PUPILS OF STATE
AT DIFFERENT RATES OF EXPENDITURE**

element of control could be avoided to a large extent within the state, so far as the national program is concerned.

Of course the necessity of leaving the initiative to the states to eliminate undesirable conditions would make the expansion of federal support a comparatively slow process. It is probable that two or three decades would be required. Greater speed would involve forcing of state action or the introduction of a certain amount of control.

It should be obvious that the introduction of national support need not await, as has been proposed in some quarters, the putting of things to rights in the states. National action can and should be used in the process of putting the house in order and this can be done without involving national control.

Can Politicians and Laymen Select Textbooks?

By NELSON B. HENRY, Assistant Professor of Education, University of Chicago

CHoice of textbooks for use in public schools has been made the subject of definite legislative provision in every state. A variety of methods may be observed in these legislative enactments, but in every case the schools and school systems affected by specified adopting regulations are designated and the responsibility for the selection of the textbooks to be used is clearly placed. In eighteen states the area within which the adopted texts are to be used is defined as that of the school district, the city, the town or township. In five states schoolbooks are adopted for use on a countywide basis. In the other twenty-five states the principle of statewide uniformity is recognized and the adopted textbooks are prescribed for use in local school units in the state.

There are likewise varying provisions with respect to the agency employed in making textbook selections. In New York State, one of the eighteen states where textbook adoptions are under local control, textbooks for use in the common school districts are chosen by a two-thirds vote of the legal voters of the district who are present and voting in the annual meeting. In other districts of this state and in all districts of the other seventeen states of this group the selection of textbooks is left to local school authorities.

The State Board as an Adopting Agency

Of the five states where books are prescribed for uniform use on a county basis, the adopting agency is the county board of education in two instances and a textbook commission or committee in the other three. Of the twenty-five states in which textbooks are adopted for uniform use throughout the state the adopting agency in thirteen of them is the state board of education. In the remaining twelve of the uniformity states a textbook commission is especially appointed for the purpose of adopting textbooks. In view of the fact that the textbook has an extraordinarily important rôle in the instructional procedure in American school systems, the nature and the constituency of these adopting agencies are matters of vital concern to the welfare of the schools in the states they serve.

Characteristics of adopting agencies and conditions under which adoptions are generally made suggest further reasons for questioning the propriety of undertaking the selection of books for use on a statewide basis by any method that can be formulated

Supervisory control of the public school system as a whole is vested in a state board of education in each of the forty-eight states. The powers and duties of these several state boards are defined in more or less detail in the statutes creating them and there are certain observable differences in the scope and character of the authority or responsibility of such boards in the different states. The proper functions of a state board of education are explained by Cubberley in the following paragraph:

"Subject to and in conformity with the constitution and the laws of the state, the state board of education shall exercise legislative functions concerning the educational system of the state, determine its educational policies and . . . shall establish rules for carrying into effect the laws and policies of the state relating to education."¹

In recognition of the kind of responsibility that devolves upon the state board of education, it is generally agreed that the personnel of such a board should either consist of or include a liberal representation of the lay citizenry. The purpose of this representation of the lay public is to provide for the proper expression of public opinion in relation to the state's interest in the control and support of a system of public schools. But such specialized and technical services as are involved in the selec-

¹Cubberley, E. P., *State and County Educational Reorganization*, The Macmillan Company, New York City, 1914.

tion of textbooks require a significantly different type of judgment from that called for in relation to the services properly to be expected of a state board of education. Nevertheless, it is not an uncommon practice among the states to impose upon the state board the responsibility for the choice of books to be used in the public schools.

In the thirteen states¹ in which the state board of education exercises final authority in the matter of textbook selections, the number of members of the board varies from four in Delaware to eleven in Louisiana. Altogether these thirteen state boards include a total of ninety-six members, sixty-eight of whom are appointed by the governor and twenty of whom are ex officio members. In Louisiana eight of the eleven members are elected by popular vote, one from each of the congressional districts.

Requirements for Appointive Members

Approximately one-fifth of the members of these boards hold this office by virtue of election or appointment to some other office in the government or in the state educational institutions. In five states the governor is himself a member of the state board of education. In North Carolina the board consists entirely of ex officio members, including such officers as lieutenant governor and treasurer. Altogether the state superintendent serves as a member of the board in eight of the thirteen states. Arizona includes among the ex officio members the president of the state university and the principals of the two state normal schools, as well as the state superintendent.

The statutory requirements for appointive members of the boards in these thirteen states reveal an interesting disparity in the points of view represented. In eight states the appointive members of the state board are selected by the governor without any restrictive qualifications. In one other state, Delaware, the statute merely stipulates that not more than two of the four members of the board shall belong to a given political party. This freedom of selection is obviously designed to permit the appointment of members entirely on the basis of their qualifications for service on the board and of their interest in public education. The implication is that such a board need not represent either a definitely educational or lay point of view, but rather that the authority making the appointments should have a free hand in the selection of persons judged to have the necessary qualifications. Under such rulings the state board may consist largely or entirely of either professional or lay representatives.

¹Arizona, California, Delaware, Georgia, Idaho, Indiana, Louisiana, New Mexico, North Carolina, South Carolina, Texas, Virginia and West Virginia.

A different expression of legislative attitude toward the composition of a state board of education is manifested in the laws of Georgia and Arizona, Georgia requiring that three of the four appointive members of the state board must have had at least three years' teaching experience in that state, and Arizona designating one city school superintendent, one county school superintendent and one high school principal as the three appointive members of the board. It is clearly the intent of the law in these two states to ensure that the educational point of view shall be definitely represented in the deliberations of the state board.

The other extreme is represented in the Texas law which requires that the board of nine appointive members shall be chosen from among the citizens of the state who are not professional educators. Apparently there was some uneasiness on the part of this legislature that the interests and attitudes of members of the teaching profession might be overemphasized in the deliberations of that board.

There is no very obvious explanation of the lack of uniformity in the theory back of these three types of legislative definitions of the make-up of a state board of education. Presumably these several state school systems are sufficiently alike in their aims and purposes that it is unlikely that the three different types of stipulations with respect to the choice of board members could serve equally well the needs of the schools in the different states affected by them.

Textbook Committees Assist Boards

North Carolina provides for a state board consisting entirely of ex officio members. This is obviously the least promising method of securing intelligent service free from political influence. However, the law makes provision for a textbook committee that examines the books submitted for adoption and makes recommendations to the state board. Membership is limited to persons who are actually engaged in school work in that state. They are appointed by the governor and the state superintendent of schools. California likewise provides for a textbook committee of ten, six of whom must be selected from among the members of the teaching profession of the state.

Texas requires the state board to appoint a committee of five persons actively engaged in school work to prepare a list of recommendations for the consideration of the board. In Virginia there is a committee of three, consisting of two members of the state board who are trained educators and the state superintendent of schools. Thus two of these thirteen states require profes-

sional representation among the appointive members of the state board and four of them provide for the appointment of a textbook committee to make recommendations to the board. This plan is presumably designed to avoid the criticism that is apt to be incurred by a group of laymen who undertake to render the technical service required in selecting textbooks for school use.

Textbook Commissions Make Adoptions

However, the state board rather than the textbook committee passes final judgment on the list of books to be adopted. The board may and at times does make other decisions than that presented by the textbook committee. An example of such action is afforded by the recent arithmetic adoptions in California. The curriculum commission, as the textbook committee is called, made a thorough-going study of all arithmetic texts presented for the consideration of the state board. When all results were noted it was found that one set of arithmetics was rated considerably higher than all of the others. The commission, however, listed the six different sets which received the highest scores. In considering the recommendations of the commission the board decided to adopt the text that appeared as second on the recommended list, giving consideration to the price factor.¹

The significant fact is that in ten of these thirteen states the final choice of textbooks to be adopted for uniform use in the public schools is in the hands of a board which includes or may include a majority of lay members.

Twelve of the uniform textbook states have delegated the responsibility for textbook adoptions to a separate board, generally known as the textbook commission.² This commission differs from the state board of education in that it has no other duties to perform and meets only when questions pertaining to adoptions require consideration. Like the state boards, these commissions vary in size and in the qualifications prescribed for the appointive members, and, with two exceptions, they include one or more ex officio members. The qualifications prescribed for appointive members are in general similar to those noted in relation to the textbook committees which serve as agents of the state boards, as described in the preceding section. Unlike these committees, however, the textbook commission is independent of the state board and adopts textbooks on its own authority.

The twelve commissions have a total member-

ship of ninety-two, the five largest groups numbering nine each and the smallest having five members.¹ There are twenty-five ex officio members, including the state superintendent in ten instances and the governor in four. The Montana and Oregon commissions do not include any ex officio members, but the Florida commission is constituted entirely of ex officio members, including the secretary of state, the attorney-general, the treasurer, the comptroller and the commissioner of agriculture. In this case, however, a committee of seven educators submits recommendations to the commission. The Kansas commission includes the state printer, while those of Nevada and Utah include certain executive officers of higher institutions. A total of ten of the twenty-five ex officio members of these textbook commissions are state officials in noneducational positions.

The legislative enactments creating textbook commissions in these twelve states seem to imply that those agents of a state who are to select the textbooks for the state school system should be chosen with different qualifications in view from those that are regarded as essential in relation to the services expected of state boards of education. It is difficult to see how such officers as the governor, attorney-general and treasurer can be expected to possess qualifications that fit them particularly well for service on a state textbook commission.

Political Aspects Must Be Considered

On the contrary, the lack of such qualifications on the part of persons commonly chosen for these state officials is so obvious that their membership on a textbook commission is evidence that the political aspects of textbook adoptions are not to be ignored. This is particularly true in the case of the governor who is usually the recognized leader of the dominant political party in his state. Moreover, either directly or indirectly, he usually controls the appointment of members of the commission.

With the exception of the state superintendent, who, even though elected by popular vote, may be expected to have a definitely professional interest in the selection of books for use in the schools, there is no valid reason why any incumbent of office in the state government should be a member of the textbook commission.

The appointive members of the textbook commissions in these twelve states are chosen largely from the teaching profession, only thirteen out of

¹Evaluation of Arithmetic Textbooks, State of California Department of Education Bulletin, No. 19, California State Printing Office, Sacramento, 1932.

²Alabama, Arkansas, Florida, Kansas, Kentucky, Mississippi, Montana, Nevada, Oklahoma, Oregon, Tennessee and Utah.

¹Mississippi has two commissions of nine members each, separate groups being chosen for elementary and for high school texts. Counting both of these commissions gives a total membership of 100, the state superintendent being included in both lists.

a total of sixty-seven appointments being reserved for citizens who need not be educators. In Alabama, Kentucky, Mississippi and Oregon the commissions are composed entirely of educators. With the exception of Kansas, where the commission includes one county superintendent, one city superintendent and three persons "not actively engaged in school work," the number of educators appointed exceeds in every case the number who may not be educators. The Arkansas law provides for the appointment of four educators and three business men, one of whom must be a lawyer. Of the six to be appointed in Oklahoma, one must be a woman. It is a frequent stipulation that the educators appointed must be actively engaged in school work.

Regulations Pertaining to Adoptions

In general, these textbook commissions include a much larger representation of persons qualified to deal with textbook questions than do state boards which pass final judgment upon the books to be adopted for use in their states. It is significant also that in three states—Alabama, Kentucky and Oregon—the appointment of members of the textbook commission is left to the state board rather than to the governor. If a choice of textbooks is to be made by any single agency and is to be prescribed for use on a statewide basis, the members of the adopting agency should be selected entirely on the basis of their qualifications for the service to be rendered and the appointments should be as free of political control as it is possible to make them. In these respects, the textbook commissions now provided for are somewhat less objectionable than the state boards which pass upon textbooks.

Adopting agencies in the uniform textbook states are given a large measure of freedom with respect to the choice of books to be prescribed, but there are certain regulations pertaining to adoptions which are both interesting and significant in relation to the general question of policy regarding state uniformity. In ten of the twenty-five states a multiple list of two or more texts is provided from which county or city authorities may choose books to be used in instruction in high school subjects. In Delaware a similar plan is followed with respect to elementary grades. This procedure is designed to remove some of the objections to the requirement of a single series prescribed for use in the schools and school systems of varying conditions and characteristics. In three states the adopting agency is not expected to choose books for use in the high schools and in three others this is left to the board.

One of the important regulations to be observed

is the period of time during which the adopted books are to be continued in use. In two states, Idaho and South Carolina, the period of adoption is left to the discretion of the board. In North Carolina the adoption period may vary with different texts from one to five years. Nine of the states specify an adoption period of six years, ten states use the adopted texts for five years and two states limit the period to four years. Any definite period of adoption is open to the objection that improvements in the books adopted and the appearance of other more suitable publications cannot be taken advantage of because of existing contracts.

There are occasional provisions for the modification of the period of adoption under special considerations. An example is the Kansas law authorizing a change of text in any high school subject before the expiration of the adoption period if necessary to meet college entrance requirements. More frequently the statute expressly forbids a change in less time than the period of adoption.

Another limitation upon the changing of textbooks is found in the requirement frequently made that only a portion of the adopted list may be changed at any given time or for any given adoption period. This type of legislation is probably to be regarded as in keeping with the motives underlying state adoptions. Considering the chance of poor selections under state adoption, there is little question but that these limitations tend to magnify the disadvantages of uniformity and to continue the use of unsuitable books longer than they might otherwise be used.

Requirements to Be Met by Publishers

The regulations pertaining to adoptions in all cases set forth the requirements to be met by publishers submitting books for adoption. These include rules governing the filing of books to be considered for adoption, usually requiring a fee for the privilege of filing, and bonds ensuring the execution of contract on the part of successful bidders and for the "faithful, exact and honest performance of all terms of contract." Bonds of the latter type are frequently as high as \$20,000.

The Oregon regulation requires publishers to take up from the shelves of dealers all new books that are displaced by the adoption of their publications, to pay transportation charges on both new and old books exchanged and to allow dealers 15 per cent of the exchange price of new books on all exchanges effected. Many such regulations are not only needless but must obviously increase the cost of new books to the patrons or school districts purchasing them.

A Layman Looks at Public Education

By ARTHUR B. HEWSON, Mechanical Engineer, Arlington Heights, Ill.

THE tremendous shrinkage in the taxpayer's ability to pay should logically suggest a reappraisal of all public institutions with a view to bringing their activities within the decreased revenue available for their support.

In the case of the public schools such a reappraisal is better made by persons with the outsider's perspective than by the pedagogues whose very nearness to the object of their examination usually results in distorted views of essential values.

The outsider, of course, is neither interested in methods nor qualified to formulate them; that is the pedagogue's task. The outsider is interested only in results and is qualified only to suggest policies that will produce results. Those results need to be more of a fulfillment of the original purpose of public education than those that have been achieved heretofore.

There is a growing conviction in the minds of many persons that the whole educational system needs redirection. There is a widespread belief that much of its present program is based on ideas which, though long sanctified by tradition, have nevertheless lost their usefulness. The first step in a proper consideration of this subject should be the setting up of some fundamentals.

Pupil Should Be Taught What to Read

First of all, what is the chief aim of public education? It is the development of the boys and girls of the land into intelligent, competent citizens with definite purposes and aims arising from personalities made aware of themselves by a well rounded development of their potentialities.

Next, how can we accomplish these purposes most effectively? Two objective principles, it seems to me, comprise all that is necessary for this accomplishment, (1) stimulation of constructive and creative thought and (2) development of capacity for the expression of such thought in language and action.

Such broad fundamentals necessarily require interpretation as to their application in major detail. It is vital that these fundamentals be intelligently applied in the elementary schools so that

A mechanical engineer and former school board member believes that schools need redirection. He suggests philosophy as the key subject in high schools, with greater emphasis laid on psychology and various social studies

a maximum capacity may be developed in the pupil to react to the stimulating and developing processes to be brought into play later in the high school and university.

The pupil should be taught not only to read but what to read. Reading schedules should be based on the idea of laying a broad foundation in the pupil's mind for a sound, well rounded, questing philosophy of life which will develop individuality and initiative and will accept pronouncements of others only after examination and analysis have proved the teaching offered to be sound. It should include both the conservative and the radical, the burners of incense to traditional idols and the idol breakers, and should cover the highlights of all branches of human knowledge. It is important that the schedules be carried out through aroused interest and not by arbitrary requirement. The reading program principle is stated in general terms. The details of its application, of course, will cover a wide range between the first and the eighth grades.

In high school the pupil today is taught English, Latin, French, mathematics, general science, chemistry and other subjects, some of which are of questionable value. Aside from that, however, the greatest lack of high school education is coherence and interest stimulation. There is no key subject that coordinates all these various branches of learning in such a manner as to lead the pupil to an understanding of what it is all about.

The graduate goes forth with a little unrelated information that fits him in a pitifully inadequate fashion for the task of earning his living. In fact, it is only when he begins the task of earning his living that his education really begins. He blunders along and at thirty, forty or fifty—perhaps never—he learns as much of life and what it should hold for him as he should have started with at twenty under a proper educational system.

That is largely what is the matter with civilization. That is partly why we lack leadership, elect demagogues to public office and are governed by interested minorities.

The key subject in high school should be philosophy in its true sense, namely, the science of sciences. Philosophy is that science which correlates all human knowledge as to things in the fields of mind and matter into a system that enables a man to live intelligently. The pupil should study psychology so as to acquire some knowledge of the motivating factors in the action of the human mind. The pupil should be taught the elements of social science so that he may learn something of his place in this world, his proper relationship to his fellows and the spirit of tolerance, cooperation and fair play. The pupil should be taught the fundamentals of music so that he may benefit by its elevating influence. Athletics should be as much a part of the curriculum as mathematics because it is an essential stimulus in the business of character building.

The study of Latin and French in the high school is a pure waste of time and is continued only because it is a cultural tradition utterly without basis in logic or common sense. Latin and French should both be dropped by the universities as entrance requirements as Latin has been dropped at Harvard and Princeton.

Teaching Correct English Is Vitally Important

In days gone by the literate were literate in Latin; hence it became the vogue for those who aspired to literacy to study Latin. In a later age French became the accepted language of chivalry and fashion. Those illiterate in French, wishing to become the élite, aspired to a knowledge of French as a key to social recognition, another cultural tradition without value.

Language is merely a means whereby we give expression to thoughts and ideas and convey to our listeners more or less perfect word pictures of our ideas. Few of us know our own English tongue nearly as well as we should. If we learn our own language thoroughly, we have a greater vocabulary and wider range of meaning shadings than can be found in any other tongue. If a person selects a certain system of shorthand as the one that will serve him best, he does not study two other systems to enable him to understand better the one he is going to use. He concentrates and perfects himself in the one of his choice.

If we are to spend public money for the teaching of languages other than our own, let them be Spanish, the language of the Western Hemisphere which has become our neighborhood through increased speed of travel and communication, and

German, the next in importance to English as the language of commerce in the Eastern Hemisphere. It is questionable, however, whether the teaching of languages other than English should be within the scope of public education except in the state university.

In the teaching of expression in action should be included training of the hands themselves to dexterous use and intelligent use of tools. In no case should attempts be made at special vocational training as part of the program of public education except in the university or in affiliated, industry sponsored, apprentice schools.

Grading Reform Is Needed

Machine lathe work or woodwork should be done in high school not with the idea of making machinists or woodworkers, but to develop a capacity for proper coordination of hand and brain in giving concrete expression to an idea. Drawing should not be taught with the idea of making artists or draftsmen of the pupils; rather, it should aim to develop their capacity to express their ideas in picture form.

Domestic science should be taught to girls principally to prepare them to take their proper part in the business of home making in an intelligent way, and also because cooking and needle work are equivalent to the handiwork and tool work through which boys are taught expression in action. Typewriting and stenography and all other vocational courses should be excluded from the curriculum of the high school.

Grading of pupils in all schools should be radically reformed. Examinations should be on a basis that stamps unmistakably the results submitted for grading with the individuality and personality of the individual pupil.

How to apply the system outlined is the job of the pedagogue, and to do it is a task that would tax to the utmost his capacity to discard his thought patterns. If he can successfully cast off these worn-out formulas he may share in the great adventure of building an intelligent democracy far different from the inert dumb thing we call democracy today—a democracy that would in itself remove all use or excuse for Mussolinis or Lenins.

New Educational "Talkies"

The University of Chicago recently produced two new educational talking pictures entitled "Energy and Its Transformation," and "Electrostatics." Information regarding these films and how they may be obtained for use in schools may be secured by addressing the University of Chicago Press, Chicago.

Schools Must Modernize Their Publicity Methods

By B. H. VAN OOT, State Supervisor of Trade and Industrial Education, Richmond, Va.

YOU educators ain't contented with the little old brown schoolhouse like the one I was learnt in. No, you must build palaces and castles and equip them with theaters and banquet halls. You must build gymnasiums and learn the kids to jump up and down, and construct arenas in which the gladiators of distant cities are challenged to combat. You entertain the kids by providing opera houses and vaudeville shows and feed them in elaborately equipped banquet halls. You learn 'em to whittle, to make doll dresses and fancy cookies, and now your latest 'wrinkle' is to provide 'em with free textbooks. When I was young, I used to get all my exercise by walking four miles to school through rain and snow and mud. Now you send chariots about the countryside to gather 'em in. The kids nowadays ain't got half a chance for you don't let 'em do anything for themselves. You do everything for 'em and expect the poor taxpayers to pay for all these things."

His Remarks Set Us Thinking

The above is part of a straightforward, unsolicited lecture delivered to me in the smoking compartment of a day coach while I was on a school inspection trip. I had been conversing with a fellow educator about the advances education had made during the past decade and had mentioned certain advantages school children today enjoy that were not provided when I was in school. Among these were athletics, cafeterias, student social organizations, bus transportation, methods of teaching, vocational education, consolidation of schools, free textbooks and similar school facilities.

In the seat on the opposite side of the compartment from my friend and me sat an elderly man who was apparently interested in the contents of a magazine, but evidently was paying more attention to my recital of present day school opportunities than he was to the magazine. Just before we reached our destination, he broke into a tirade of sarcasm that I shall long remember. The fact that I can recall in considerable detail the points of the school program that he criticized so severely is sufficient evidence that his points of attack were

extremely forceful. At least his remarks set us thinking.

Evidently my companion was as much impressed with the man's lecture as I was, for later in the evening he reopened the discussion.

"What do you suppose that fellow had in the back of his mind when he criticized the public school system so severely?" he asked. "Are we doing too much for the children? Are we robbing them of their opportunities for self-expression and self-realization by substituting organized play, gymnasium exercise and competitive games for natural activities in which rural children would engage if they were not provided with present day recreational facilities? Are we spending too much money in building 'arenas in which the gladiators of distant cities are challenged to combat,' and what about the large number of children in these cities who are not classed as gladiators and who do not 'make the teams'? What facts have we that prove our investments in 'theaters' and 'vaudevilles' (school entertainments) are socially, economically or educationally worth while; and if we do have those facts, have we been negligent in informing the public of the values of these investments? Why did this patron of the school call the cafeteria 'an elaborately equipped banquet hall'? Has some superintendent gone to extremes with the public's money to make a show place of his cafeteria?"

"I Don't Know," Says the Average Citizen

While valid general deductions cannot be made from the remarks of a single individual, yet when one individual so forcibly and sarcastically criticizes the things in education that educators consider the achievements of the age, one wonders what is in the minds of the more reticent citizens.

When an otherwise intelligent and well informed citizen cannot discuss educational problems with educators except to relate experiences encountered when he was in school, it is a sad commentary upon educators who, along with their other duties, have the responsibility of keeping the public informed relative to school progress. If we do not believe that educators have failed in this responsibility

all we have to do is to discuss any one of a dozen school problems with a selected group of intimate acquaintances who are not associated with the administration of schools. Their reactions are "I don't know." "That is out of my field of endeavor." "I leave all those things to you educators." "Something ought to be done about them," and similar noncommittal answers. There are persons who have pronounced ideas, but their ideas are either contrary to accepted theories of education or are based on their childhood experiences. It is for this reason that laymen, and school people too for that matter, wish to eliminate the twentieth century subjects now being offered in schools, and cling tenaciously to the sixteenth century subjects. This attitude was described clearly by Frank Cody in his article "Schools Must Outwit the Handicaps of Pennywise Policies," which appeared in the November, 1932, issue of The NATION'S SCHOOLS.

Publicity Methods Must Be Improved

The material facilities for educating the public relative to educational aims and objectives were never more abundant than at the present time, but there is a lack of technique in getting the message across to the public. Articles written by educators and published in educational magazines seldom reach the school patron. Surely there are educators who can develop a popular style of writing acceptable to the publishers of magazines that are read by the layman.

Lectures dealing with education are broadcast periodically over the radio. These are usually formal presentations of some phase of educational endeavor. But what layman will listen to a formal discussion of education when he can turn the dial to a popular program? There must be educators capable of developing a technique that will compel even greater attention than the programs of the commercial firms. If a manufacturer of a breakfast food can enroll hundreds of thousands of school children in a mythical secret organization as the result of a few months of radio advertising, surely some educator should be able to devise a scheme that would stimulate interest in some phase of education if it is really the vital force in society that it is claimed to be. The most effective endeavor along this line to date was made by Henry Groseclose, who conceived the idea of enrolling all the agricultural high school boys in the United States in a national organization known as the "Future Farmers of America." These future farmers through their home projects and father and son meetings are doing an inestimable amount of effective advertising for the schools.

The daily press is liberal in spreading news if anything goes wrong in the school system or if

some extraordinary program is put into effect, but few newspapers have endeavored to acquaint the public with the aims and objectives of public education. The few articles that appear are written in a style that does not appeal to the public.

Parent-teacher organizations and civic clubs probably are the most promising avenues through which to educate the public. The programs sponsored by these organizations make one wonder whether educators have helped formulate the programs and helped those in charge to secure facts. More has probably been done through these organizations than through any others in bringing education to the attention of the public, but much remains to be done, especially in writing up school facts in a popular style.

Some progress has been made alone this line. The Sunday evening broadcasts of the National Education Association evidently are reaching some laymen, but the benefits of these are largely offset by the radio harangues arranged by those who would cut off the schools from government and state support.

Prof. Arthur B. Moehlman, writing in the January, 1933, issue of the *New Outlook* under the caption "The Depression Demagogue at School," has struck forcibly at would-be economists who would sacrifice the children to gain some selfish objective. His picture of the decline in the material facilities for carrying on efficient instruction, of the attacks being made upon those social phases of school work that educators know to be worth while, of the competition in the teacher market, and of the importance of adult education is a picture every educator should convey to the patrons of his school. More articles of this type are needed.

A Challenge to Educators

Educators must remember that this is an age of competition. If they are to compete for public favor with other organizations and commercial firms they must utilize the same or even more effective methods than those used by their competitors. They must capitalize on public sentiment and apply some of the psychology in which they are supposed to be specialists, but which has been used more effectively by others in gaining public attention.

This is a challenge that educators cannot afford to neglect. I do not mean that they should lower the dignity of the profession. I simply mean that educators should plan a practical, nationwide campaign to present education's program in a manner acceptable to and appreciated by the layman. Among the long list of intelligent American school men and school women there are persons capable of meeting this challenge.



A Library Nucleus That Serves 150 Rural Schools

By CYRIL E. LAMB, Ypsilanti, Mich.

RURAL schools of the one-room type, still numerous in all parts of the United States despite the tremendous advance in educational facilities during recent years, are pitifully lacking in general reading material. This fact is quickly discovered by teachers whose work carries them into the country districts where library facilities are almost unknown.

The entire general library of such a school can usually be contained on one short shelf in a corner of the room. Pupils, if they are interested in reading, soon exhaust the possibilities of these books and fall into the habit of devouring the contents of cheap magazines which are passed from hand to hand, often surreptitiously.

While some educators may believe that the one-

room school is a vanishing institution, statistics compiled recently by E. M. Foster, chief statistician of the Federal Office of Education, prove this belief to be erroneous.

During 1930, the last year for which Mr. Foster has obtained complete data, there were 148,712 one-room schools in the United States. The highest percentage of these was found in the west north central division of states including Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas. In this section 46,186 or 79.69 per cent of all schools are of the one-room type. The next highest percentage is found in the east north central division including Ohio, Indiana, Illinois, Michigan and Wisconsin, where 68.46 per cent of all schools contain but one room.

Approximately 60 per cent of all school buildings in use in the United States are still of that type, according to Mr. Foster. With these figures before him, the educator becomes keenly aware of the importance of providing needed facilities for the pupils of these schools. In the matter of libraries, he has his choice of several courses of action. The simplest of these is to let the situation alone. Such a course is unthinkable to the teacher who is deeply interested in the welfare of her charges.

A second possibility is that of explaining to parents and the board of education the necessity of providing library facilities. Such a course is fraught with tremendous difficulties. Arguments, not supported with demonstrations, are apt to go unheeded. The financial outlay required for the purchase of books looms large in the eyes of residents of the district.

Starting a Library Without Cost

A third course of action, one which has proved highly successful in Washtenaw County, Mich., is to provide without cost the nucleus of a county library for the use of all rural schools. Such a plan stimulates reading interest on the part of all pupils in the country districts. A 3,000-volume nucleus of what will some day be an adequate library for the 150 rural schools of the county, all without a cent of cost to anyone, may seem like a dream but it has become a reality in Washtenaw County.

Like many important educational movements, this library project started in a small way, and has grown far beyond the expectations of its sponsors. Believed to be the first project of its kind in the United States, it has already attracted the attention of both urban and rural communities over a wide area.

Although Michigan, like many other states, maintains a rural traveling library, its facilities failed to supply the needs of growing children whose appetite for reading had been stimulated by a campaign instituted by the county commissioner. Certificates had been issued to children who read five approved books and a gold star had been pasted on the certificate for each additional book read.

In a short time the reading habit was fixed with the children and they had exhausted the meager libraries of their own schools and the books provided by the traveling library. Their demands for more books fell on deaf ears, however, for the older persons of the communities had not been sufficiently convinced of the need for additional volumes.

The problem came to the attention of the Ann Arbor chapter of the Daughters of the American

Revolution, whose members contributed fifty books. The Ypsilanti Business and Professional Women's Club then became interested in the needs of the schools, although its members were not in a position to expend large amounts of cash or to stage a public campaign for funds.

"Many persons," suggested one of the club members, "own books which were purchased for their children or perhaps used by themselves in their younger days. Many of these books are in excellent condition and are just as interesting and beneficial for the children of today as they were for those who first read them." The cooperation of the local newspaper was asked and enthusiastically given. Through its columns the project attained wide publicity and storage space was provided in a room at the newspaper office for contributed books.

A circular letter, mimeographed by one of the club members and signed with the name of the club, was mailed to each home in the city. Provision was also made for collection of books when contributors had no convenient method of transporting them to the newspaper office.

Response to this letter was immediate and liberal. The piles of books in the newspaper office grew by leaps and bounds. Within two weeks more than 2,000 volumes had been contributed and then the books continued to come in at a slower rate until more than 3,000 had been received.

A mere collection of miscellaneous volumes is of no value to rural school children, however, and the problem of cataloguing the gifts nearly staggered the persons in charge. This difficulty was overcome when a professional librarian volunteered to catalogue the entire collection without charge. County authorities permitted the use of a third floor room in the courthouse for storage purposes and there the library is housed.

How the Library Is Operated

Some of the books contributed proved unsuitable for children's reading. These were sold and the proceeds were utilized to purchase others. A number of somewhat shopworn books were contributed by a bookseller in the community.

To cover the actual cost of operating the library, each school district is requested to contribute one dollar annually, this sum serving also to provide a small fund for the purchase of additional books each year. A majority of the districts took immediate advantage of the plan and the number is rapidly growing as its advantages are more fully realized. Districts that do not make the small annual payment do not receive the benefits of the library.

Of the 150 rural schools in the county, 146 are

A group of children in a one-room rural school of Washtenaw County, Michigan, examining some of the books and magazines of the newly established circulating rural library.



of the one-room type and require the services of only one teacher. These schools, many of them with only a handful of pupils, benefit most from the unique library nucleus. Each teacher may visit the library room in the courthouse, either

with or without pupil representatives, and select a limited number of books to take to her school where they may be kept not longer than four weeks. This provision assures constant circulation of books among the various schools.

The volumes may be returned to the central library by the teacher or she may exchange them with another teacher at the next bimonthly zone meeting of teachers, provided the time limit is not exceeded. When such an exchange is made, a careful record is filed with the library so that it is possible to learn at a moment's notice just where any particular volume may be found.

This nucleus of a library is proving to be a powerful stimulus to the educational system of the county. Children in the rural districts are becoming more and more converted to the habit of reading good books and magazines and parents are realizing more keenly the need for an adequate supply of books.

History, fiction, biography, classics, travel, nature study and many other subjects are included among the contributed volumes and the demands of the children for further reading opportunities are constantly growing more insistent. The library now includes many volumes of standard magazines such as the *National Geographic*, *Nature Magazine* and others of constant and continuing interest.

With the children awake to the possibilities found in good books and with the parents becoming aware of their needs, it is believed that both parents and boards of education will soon become willing to bear the cost of a moderate annual tax for library purposes. Such a tax will soon build up a really adequate library that will provide rural chil-

dren with reading advantages approximating those enjoyed by pupils in the urban centers where large school and public libraries are within the reach of every child.

The possibilities of the nucleus plan are almost unlimited. With minor variations as to details, it can be utilized in any community. Already a number of inquiries have been received from educators in distant parts of the United States. Several neighboring Michigan counties are planning to establish their own rural libraries by this method of creating interest and educating children, parents and boards of education regarding the need for and the value of adequate facilities for good reading.

Pupil Participation Is Favored in Iowa High Schools

The participation program is in use in only 5 per cent of Iowa high schools, but these schools have enrolled over 43 per cent of all high school pupils of the state, according to Chris B. Hartshorn, superintendent of schools, Hiteman, Iowa.

The movement is growing in favor with both pupils and faculty members who have tried it. There has been a gradual increase in the number using participation in school government during the last five years. Those programs are proving least satisfactory to the pupils which allow little pupil initiative in government. High school boys and girls resent that type which gives to them a purely perfunctory rôle.

The pupil improvements attributed to participation are: (1) pupils learn to cooperate with each other and with the school; (2) pupils develop initiative and self-reliance; (3) citizenship ideals have become functional; (4) scholarship levels have been raised.

What Others Have to Say . . . about federal subsidies

SUPT. PAUL C. STETSON, Indianapolis: At the present time I am not in favor of federal subsidy for our public schools. My position is based on the fact that such a subsidy entirely violates the traditional principle upon which our schools were founded and have been conducted, that it will result in control through a bureau and that bureaucracy means the death of progress.

Such federal subsidy to one community immediately raises the question in other communities until it is conceivable that such practice could result in a besieging, on the part of all communities, of the newly established bureau for a subsidy which, if granted, would mean the complete breakdown of local control and interest.

This is a safe principle: that control flows to the agency furnishing the funds. It cannot be otherwise.

I favor federal aid to stricken areas where the evidence is conclusive and complete that those localities and states have exhausted every resource for the support of public education. When this has been demonstrated, federal aid as a national policy should be adopted.

DEAN J. B. EDMONSON, University of Michigan: In my opinion we need to emphasize that education is a state responsibility that should be shared by the local community and by the federal government. However, I do not favor any kind of participation by the federal government that would lead to a control of the state's educational policies. I strongly endorse the policy proposed in a report of the National Advisory Committee on Education, which is stated as follows:

"Make all future grants to states as grants in aid of education in general, expendable by each state for any or all educational purposes as the state itself may direct."

I believe that we should urge federal aid at this time on the basis proposed in the foregoing statement of policy. It is my belief we are justified in using the federal tax system to secure funds for the financial aid of the educational programs of the several states. The

great disparity in income of the states and the increasing difficulties of reaching certain types of wealth through our state systems of taxation appear to justify a program of federal taxes for education.

PROF. ARCH O. HECK, Ohio State University: Yes, federal aid is necessary at this time. The need has always existed. Today it is greater than ever. We are not forty-eight independent commonwealths. If one state chooses to breed ignorance, the remaining states cannot close their doors upon the people so bred. Neither is there equality in the ability of states to provide for their children.

Necessity for federal aid has recently been intensified; this is due to increased demands placed upon the schools and to increased inequalities in ability to pay. Industry employs less youths under eighteen; the NRA is demanding the prohibition of labor under sixteen; states are awakening to the need of federal control of child labor under eighteen. Such prohibition demands a school program to care for children until labor is permitted. The best schools are inadequately providing for all youths until eighteen; yet such a program is indispensable if children are to become self-supporting, self-amusing and self-directing.

States and localities must be given the aid necessary to provide such an education. Property taxes are being defaulted as well as lowered; property valuations are being slashed; states dependent largely upon such support are closing schools, cutting educational necessities partly from need, partly from unreasoning fear. Federal help can both aid and stimulate local effort.

SUPT. FRANK CODY, Detroit: Under existing conditions financial support from anywhere would be welcome; but if it were to come from federal sources it should be considered purely as an emergency measure. This is true because federal support of local schools inevitably involves a congeries of intricately interwoven complica-

tions that should be studied and solved when conditions are normal, not during the inescapable stress that goes with a run for any port in a storm.

In spite of the fact that Michigan ranks eighth in wealth among the states, school conditions here are deplorable. The recently adopted fifteen-mill real property tax limitation, and tax delinquency combine to make adequate local support impossible for even a minimum program.

In these circumstances, an appeal is being made to state authorities to make effective the distribution of a \$15,000,000 supplementary state school fund which was authorized at the last session of the legislature, but the funds for which failed to eventuate as anticipated. It seems a logical step from state aid to federal aid.

On the other hand, such absentee landlordism might turn out to carry undesirable followers in its train. Certainly, local and state possibilities should be exhausted before "going to Washington." Federal loans to carry on local school building programs are one thing, federal grants for instruction and operation are another matter. Before pressing for them, we should, like the characters in the poem, "talk of many things."

SUPT. HOMER W. ANDERSON, Omaha, Neb.: The time is rapidly arriving when some sort of federal support must be given to education in terms of needs. It seems evident that some states are absolutely unwilling or lack the vision to provide for the adequate support of their schools. Federal assistance or federal support should be for the purpose of returning to some states the power to exercise a reasonable initiative in the development of their public schools. Some states are so far below the general economic level of the country, and always will be, that it is a burden for them to support as good an educational program as this nation requires.

If federal aid is granted, it should only be on the basis of certain minimum standards, beyond which their control would not go. Some states have already adopted state support in a similar manner without limiting the initiative of localities in building their own school systems. As a matter of fact, support of a foundation program is the only way in which poorer local communities, as well as the poorer states, can exercise the democratic principle of local initiative.

PROF. BOYD H. BODE, Ohio State University: If we are to have genuine equality of opportunity, this equality must certainly apply to educational opportunity. In order to secure such equality federal support is indispensable. I should not, however, want to buy federal support at the price of federal control; nor should I be particularly interested in federal aid if such aid would seriously interfere with the direct interest taken by local communities in their schools. If we were to have federal aid it should be applied, as far as possible, on the basis of need.

I am not clear in my mind whether we can have federal aid without federal control. The kind of standardization that federal aid would bring would be objectionable. If there were to be federal aid it should have no strings attached to it. One of the most precious features of our present school system is the relative absence of bureaucratic control.

clearly understood that whatever the basis upon which federal grants may be made, there should be no possibility, either directly or indirectly, of any control on the part of the federal government over educational procedure in the various states. Each state must be left absolutely free to control education within its own boundaries.

"Must Take Part in Financing Education" to my mind prove conclusively that the present crisis is the climax of a chronic situation, not an emergency.

Adequate public education is impossible in many parts of the United States without some form of financial equalization on a federal basis. Experience in New York State, with the Mort equalization formula, convinces me of the fundamental soundness of an equalization program based upon relative needs. The major difficulty facing education at the present time is the extent to which it is dependent upon the land tax, and this condition will continue until other forms of wealth are made to contribute to the support of public education. The most effective manner in which the taxation burden can be spread is through the federal government.

Federal support of a basic program, through an equalization formula, need not in any way affect local control. This has heretofore not been true with regard to the various proposals basing support upon conformity to a standard program. I believe that it is essential to preserve the initiative of the individual districts and am opposed to federal uniformity and standardization of educational practice. I think it is essential for us to recognize that with the Mort formula for basic aid, we are no longer confronted with the ogre of federal dictation and control.

SUPT. DAVID E. WEGLEIN, Baltimore: There is no question about the seriousness of the emergency that confronts education. The details concerning what is happening in different localities are sufficiently well known so that everyone will agree that it is necessary at the present time that action be taken to relieve the situation, and that such action be taken promptly.

There are four lines along which it is necessary to proceed.

1. Every possible economy should be instituted in the operation of school systems so that efficiency may be increased and not impaired. This step should be carried out at once.

2. States should provide, when necessary, additional financial aid for local communities in order to meet the situation that has arisen from the decrease in local revenues. Some states have already in effect adequate plans.

3. It has been shown that in most places the present system of taxation is inadequate for modern conditions. A reform in the taxation program is needed in such localities, and it should be instituted without delay. The property tax can no longer be regarded as practically the sole source of revenue for local government.

4. In this emergency, whenever states and local communities are unable to provide the necessary revenue for school purposes, the federal government should be called upon for assistance in the crisis. It should be

J. CAYCE MORRISON, New York State Department of Education: To have or not to have—that is the question. Obviously, the need is great. An ever increasing segregation of wealth is in process. In most states the tax system has broken down. Large areas are failing to provide even the barest minimum educational program. It is clear that the educational problem cannot be solved without a fair solution of the tax problem.

But why ask the federal government to undertake this obligation when most of the states have ignored the problem? Is there any prospect that the federal congress will perform this task better than the state legislatures? Will not the pouring of federal money into the states merely relieve the latter from tackling the job that is constitutionally theirs? And if the states do not solve this dual tax-education problem, is there any hope that the federal government could or would provide enough money to save education?

I am not opposed to the principle of federal aid for education but I think that the federal approach has elements of danger and futility until the several states have put their own houses in order. The attack of the friends of public education should be centered on the states. Every state legislature should be called into session this winter and kept in session until it finds an adequate solution of the tax and educational problems. Then we shall understand better the part the federal government should play in guaranteeing a reasonable educational opportunity to every child in America.

DEAN HARRY S. GANDERS, Syracuse University: Social experimentation has demonstrated that some functions of government are best performed through local units. Other functions, or even different phases of the same procedure, are most effectively carried out by the state. Still other human needs are best satisfied by the national government. The proper allocation of function to officers of local and state units or to the federal unit has raised embarrassing problems in all phases of government service.

Education cannot escape the issue. After all, the national government, no less than state and community organization, is a creation of the people. It too should serve us. A few leaders have long recognized the logic of assigning to the federal government responsibility for a minimum program of education. Unfortunately, educational inefficiency must sink to the level of schools completely closed, before the rest of us can see the light.

SUPT. WILLARD W. BEATTY, Bronxville, N. Y.: I certainly favor federal support of public education in the United States at the present time, and I decline to accept the inference that it is inexorably linked with federal influence. The figures given in Dr. Paul Mort's "National Government

How to Select the Best Teachers

By W. HARDIN HUGHES, Director of Administrative Investigation and Research,
Pasadena City Schools, Pasadena, Calif.

ALONG with the growth and development of city school systems there has arisen an increasing need for organized personnel research. It is no longer possible for the superintendent to meet personally the hundreds of candidates seeking employment in his schools. In fact, he can scarcely become acquainted directly with those already employed. Yet the superintendent is definitely responsible for the intelligent selection and placement of the teaching staff. No other function of his office is more important. Fine buildings and adequate equipment are desirable, but schools are no better than the teachers employed.

The purpose of this article is to describe briefly the technique of teacher selection in the Pasadena City Schools, Pasadena, Calif., and to set forth in graphic fashion some of the distinguishing characteristics of successful candidates.

An Acceptable Application: The purpose of the blanks used in this connection is to enable the applicant to give specific verifiable information on the following points: (a) general educational preparation; (b) special training for position sought; (c) nature and extent of teaching experience; (d) activities other than teaching previously engaged in; (e) references both as to scholarship and experience; (f) a recent photograph. An unsatisfactory written application is sufficient to disqualify the candidate for further consideration.

Final Rating Based on Five Factors

Physical Fitness of Candidate: An important qualification for appointment is physical fitness. In every case a physician's statement concerning the candidate's physical fitness is required. This is usually presented with the written application. The superintendent reserves the right to require, in addition to this, an examination by the school physician or by some other physician designated by the board of education.

Personal Interviews: Having completed the requirements up to this time, the candidate is interviewed independently by at least three members of the personnel committee. The purpose of these interviews is to enable the members of the committee to check on the personal qualities of the candidate. The accompanying rating scale is used for recording impressions thus made.

Qualifying Examination: This examination is calculated to test the candidate's mental alertness, general and professional information, and ability to express ideas convincingly on selected problems related to school work. In addition to this a technical examination in the candidate's special field may be required.

Satisfactory References: Reports from references relative to the candidate's preparation, experience and other qualifications for the position sought are collected and evaluated by the personnel committee. A graphic rating report is used for this purpose.

Composite Rating: The final rating of the candidate is determined by a combination of the five factors: (a) written application; (b) impressions made in personal interviews; (c) results of qual-

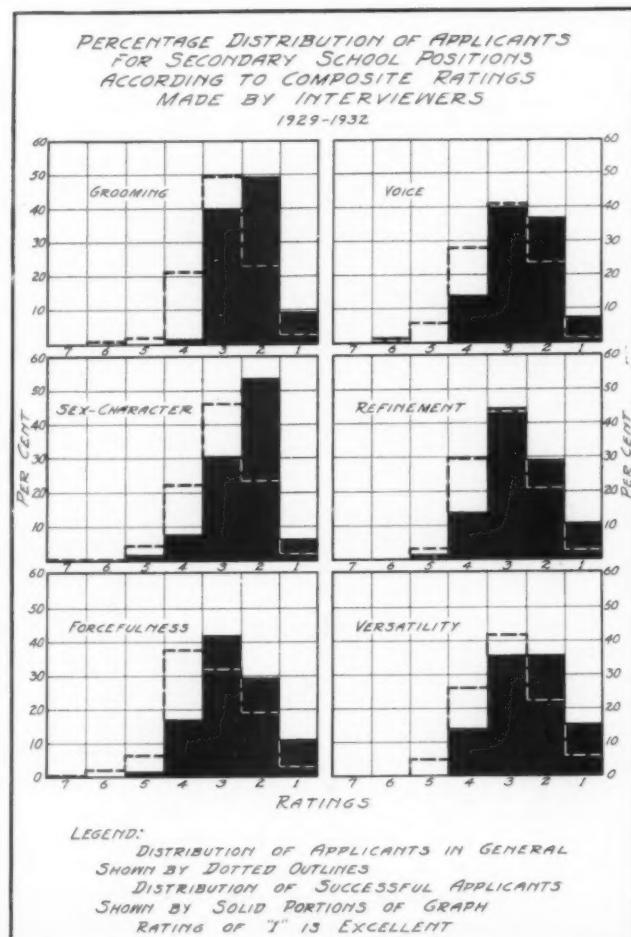


Chart. 1.

fying examination; (d) reference reports; (e) previous scholastic record. Preference is given those who stand among the best 25 per cent of candidates as determined by composite ratings. Physical unfitness, however, is sufficient to disqualify any candidate.

In the accompanying charts and tables may be seen the comparative ratings of successful candidates. In Chart 1, for example, we should note that on every personal quality of the scale the percentage distribution of successful candidates is superior to that of candidates in general. We find that only 2.6 per cent of all candidates have a composite rating of 1 on grooming, while 9.2 per cent of the successful candidates are so rated. The facts are similar for voice, sex character, refinement, forcefulness of personality and versatility of mind. There is a tendency for the personal ratings of

successful candidates to lie in the upper portions of the scale. In three qualities, namely, grooming, sex character and versatility of mind, more than half of the successful candidates have composite ratings of 1 or 2. Very few of the candidates fall below 3.

In Chart 2 may be seen the comparative ratings of successful candidates on six representative qualities. In this case the estimates were obtained from references mentioned by the candidates in their written applications. It should be noted that in the upper portions of the scale there are no significant differences between the ratings of candidates in general and the ratings of those candidates who were successful in securing appointments. In the lower portions of the scale there were significant differences in favor of successful candidates with respect to mental alertness, per-

PERSONALITY RATING OF CANDIDATE BY MEMBER OF PERSONNEL COMMITTEE

Name of Candidate..... Date.....

Guide to Rater

In making estimates, the rater will consider those qualities of personality which are in evidence and which are essential for happy association with fellow workers and students. A circle placed around one of the numbers after each item below will show the rating of the candidate on a ten-point scale.

Definition of Ratings

1 or 2 means Excellent, as good as the best 10 per cent; 3 or 4, Good, as good as the next 20 per cent; 5 or 6, Fair, only as good as the middle 40 per cent; 7 or 8, Poor, as poor as the next 20 per cent, and 9 or 10, Very Poor, as poor as the poorest 10 per cent.

Qualities of Personality to Be Rated

The rater will find it helpful to consider the following qualities as defined. A rating of the candidates should be made on each item.

1. Grooming, as evinced by neatness, cleanliness, appropriateness of dress.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

2. Voice, as evinced by enunciation, modulation, pleasantness of tone.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

3. Sex Character, as evinced by masculinity in man and femininity in woman.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

4. Refinement, as evinced by good breeding, courtesy, poise, culture.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

5. Forcefulness of Personality, as evinced by energy, enthusiasm, decisiveness.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

6. Versatility of Mind, as evinced by sense of humor, adaptability in conversation.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

7. (Any other quality of personality which may affect the candidate's value to the system either favorably or unfavorably.)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Summary Rating of Personality

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

This summary rating need not be a statistical average of the foregoing. It should be a rating from the total impression with respect to the candidate's personality and may include qualities in addition to those defined above.

Remarks:

Person Rating.....

sonal attractiveness, capacity for team work. With respect to physical vitality and professional attitude, the differences were reversed in favor of candidates in general.

The examination taken by all candidates is objective in nature excepting for an introductory part requiring something in essay form. The first section of the examination is entitled Educational Problems and is introduced by the following directions: "Three current problems in education are stated below. Select one of them and discuss it constructively. Do not try to recall what someone else has said on the subject. We are interested primarily in your own ideas. Organize these ideas logically and express them clearly. Consider the problem from the standpoint of one in the type of position for which you are making application."

A Typical Problem

While the problems are changed from time to time the following is typical: "Suppose there is a very bright boy in your classroom who is a constant source of annoyance to his classmates. Not having to work very hard to secure high marks for achievement in his studies, he has more time than he knows what to do with. It is in his idle time that he interferes with the work of others. How would you improve this situation?"

The next two sections of the examination are objective in nature and are concerned with general professional information. Representative principles of education are stated in the true-false form in a way to require critical judgment on the part of the candidate. The fourth section is concerned with general information and is in the multiple choice form. This portion of the examination is best done by candidates who are interested in what is going on in the world of affairs. Candidates who never read anything outside their special fields of interest are at a disadvantage in this part of the test. Section 5 has to do with English vocabulary. It has been standardized in such a way that the candidate's vocabulary ability can be rated accurately in terms of his school, college and graduate standing.

Examination Standing of Successful Candidates

The comparative examination standing of successful candidates may be seen in Chart 3. It will be noted that 26 per cent of applicants in general fall below the score of 75 on the examination while none of the successful candidates fall below this score. Note also that only 19 per cent of all candidates attain scores of 95 or higher while 34 per cent of successful candidates have done this well on the total examination.

Carefully devised record forms have been in use

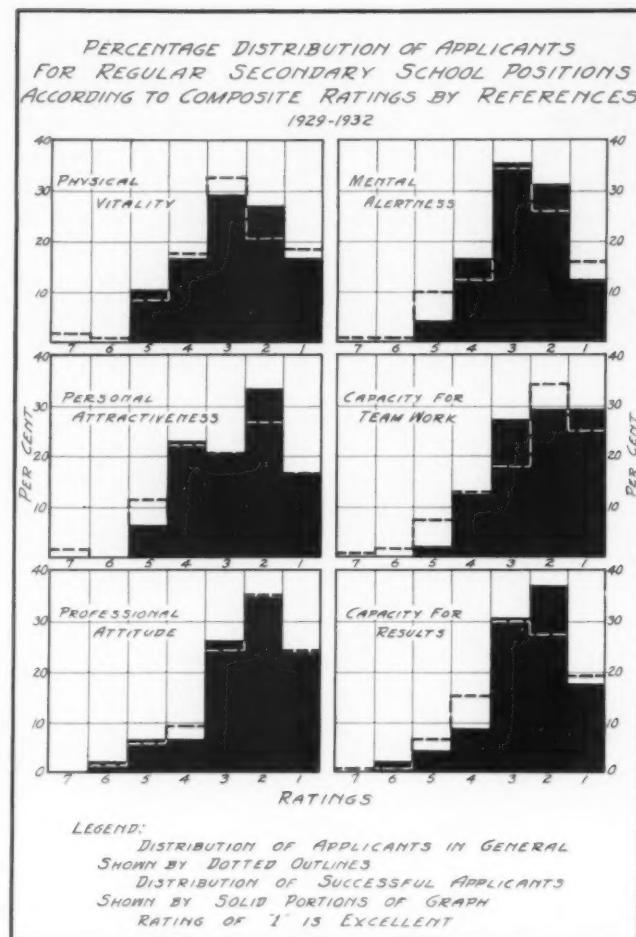


Chart. 2.

locally over a period of years. For want of space, only the divisional headings of these cumulative records together with brief descriptions of their contents can be given here. The following headings are indicative.

A. Personal Data. This portion of the record containing the more usual data of a personal nature is rather brief.

B. Experience Outside the Local Schools. Types of positions, location, length of employment are here recorded.

C. Experience Within the Local Schools. This division indicates year by year the grade or department, building and salary.

D. Educational Preparation. This includes names of institutions attended, major interests, total credits and degrees or diplomas received.

E. General Professional Credits. In this section are listed specifically the courses completed in psychology (both general and educational), principles of education, history of education, general method, classroom management, educational sociology and other professional courses of a general nature. The institution, instructor, in most cases, and credits earned are recorded for each subject completed by the teacher.

F. Special Training. In this section of the cumulative record, courses are included that have a direct bearing on the teacher's present and preferred work.

G. Nonacademic Training. Here are listed such activities extending over considerable periods of time as have contributed in an important way to the teacher's professional work. This section is intended as an exhibit of preparation which cannot be stated in terms of academic credit.

H. Travel. Here is listed such travel as may be expected to contribute to the widening vision and professional success of the teacher.

I. Scientific and Professional Contributions. This portion of the cumulative record contains

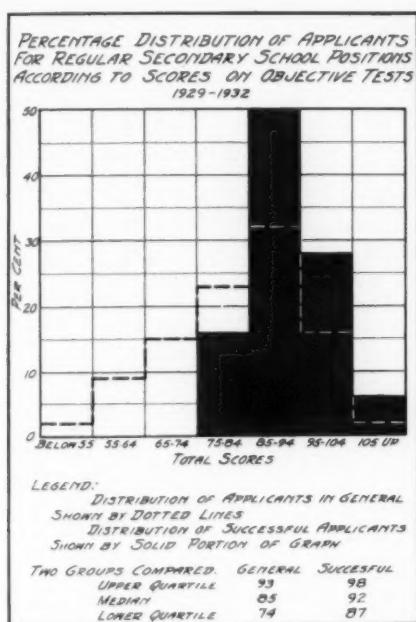


Chart 3.

titles of published articles, books and other literary and scientific contributions.

J. Active Membership in Professional Groups. Specific data concerning membership in important professional groups and significant contributions are included in this portion of the cumulative record.

K. Ratings on Personal and Professional Qualities. This portion of the record is based on the ratings reported by references and on ratings assigned within the local system.

L. Other Evidences of Success. This is used for recording such other evidences as are not included under the foregoing heads.

M. Classification on Salary Schedule. This portion of the record shows in cumulative fashion the progress of the individual teacher with respect to classification and salary.

Because of his numerous and varied duties, the superintendent is unable to consider the individual

problems of the teaching staff. For this reason he has created a personnel committee to assist in securing for the teaching corps all the benefits of a just consideration of matters pertaining to the evaluation of their professional services and such other personnel matters as may arise in the complex interrelations of a city school system. The committee exercises the functions of a referee or sympathetic friend rather than the functions of an executive body. It serves as an agency for upholding and upbuilding a professional spirit and a high quality of professional ethics throughout the teaching corps.

The specific functions of the personnel committee have been defined as follows: (1) to interview prospective candidates for appointment to positions; (2) to appraise and evaluate the applications, examinations and credentials of prospective candidates; (3) to prepare for the guidance of the superintendent eligible lists of candidates who are fully qualified from every standpoint to meet the highest requirements for appointment; (4) to examine and evaluate for purposes of classification the records of all teachers in the local system.

General Observations and Conclusions

We have seen in the foregoing report the superiority of successful candidates over candidates in general. This superiority was clearly shown with respect to the personality ratings made by members of the personnel committee. The standing of successful candidates on the objective examinations was seen to be relatively high. There were no significant differences, however, between successful and unsuccessful candidates as rated by their references. This latter finding is no surprise to those who have had extensive experience with references' recommendations. In general such recommendations are practically worthless however carefully prepared the graphic rating scale on which the judgments are recorded.

Over a period of five years, the personnel practices described in this study have been found satisfactory in the selection and promotion of teachers. The cumulative records provided for in the plan facilitate a continuous follow-up that would otherwise be impossible. One evidence of the efficiency of these personnel practices is revealed in the fact that no teacher selected within this five-year period has proved herself poor enough to justify a request for resignation. Some teachers, however, who were employed before the inauguration of these practices have resigned upon request. But the personnel procedures of any school system, however progressive they may be, need to be constantly studied and improved. Personnel research within a school system is of first importance.

Happy to Say . . .

A CHAP has just sent me a typed written letter but has omitted to type his signature which, according to interpretations by different members of our household, may be Chapin, Chapman, Clalsin, Olialslin, Champion, Oliander or Clinton. He understands so well what it is that he forgets how stupid my family and I are.

I STILL know speakers at educational conventions, superintendents at teachers' meetings, teachers instructing children, whose minds make the same mistake as Mr. Clalsin's or whoever's it is.

WOULD this following scheme help? I'll say it would.

LET the convention program makers arrange and also notify the speakers that every address will be followed by a five-minute epitome, delivered by the best summarizers attainable. Let the superintendent cause the teachers just before his message for his meeting to elect a digester of his dissertation. Let the teacher, and, above all, the college professor, establish as indispensable to every lesson a summary of it by different listeners before the period closes.

THIS is a usage that has been emphasized for twenty thousand years by writers on teaching and confirmed by research. Why don't you require its employment?

ERNEST CAMERON, who has a large part in planning Michigan educational meetings, supplies each member of an audience with a rating blank on which to score the desirable and unfortunate features of a speech. These are gathered, tabulated and used as a basis for deciding whether to invite the orator again.

BUT the speakers don't get these comments. I wonder why criticism is withheld from us who need it most.

ISHPEMING, Michigan; Cape Girardeau, Missouri; Milwaukee, and Salt Lake City are now entitled to honor-listing with all of Pennsylvania for filling the front seats as courtesy to an

invited speaker. In these towns you do not hear that shameful confession of backward management, unprogressive membership and cheap professional spirit: "Will those in the rear please come forward?"

LAST night, returning late from a meeting of our Suffolk County Society of Science where a dozen old gentlemen monthly mystify one another, I saw Harvey Hawkins, the village grocer, sitting alone in his store smoking and smoking. He opened the door as I tapped.

"Why don't you go home, Harvey?"
"I'm gloating. Have a cigar."

Then he told me of struggling with his bank balance, getting wearier and more desperately tired struggling to keep from giving up and going home. Then the error showed itself. The accounts balanced, and "all of a sudden such a flood of vitality poured all through me that I finished half a dozen other jobs I have been putting off for weeks. Then I sat and gloated." Maybe you have had such experiences.

DR. LOIS MEEK insists that this effect of success is an essential of the learning process. Teachers who let failing children give up are botchers. Every real teacher is in the success business.

INVARIABLE self-proving in arithmetic, self-correction in spelling and in other studies, not as tasks or punishment but in the pursuit of happiness, are as indispensable in teaching as is the last chapter for the satisfactory reading of a mystery story.

ENOUGH of the right kind of food, air, water, exercise, sleep, folks, play and praise are necessary for efficient work. Don't you forget the praise.

NO ONE can see that the old escape offered by great natural resources, new states and jobs a-plenty, will come back. Only a self-governing people trained to think public-mindedly can set us on the right road. Your

critics, daily increasing, cry that the main duty of the public school is to train citizens to think and plan for the unpromising future. The time to start is now.

EXCEPT for a fire drill and a few other affairs, immediate and unquestioning obedience is deadly. It has produced generations of intellectual morons.

IF YOU find yourself getting weary of your job it is a good plan to get a visitor to school and to watch him. The delight a grown person shows in looking at children indicates that it is an instinctive enjoyment which can refresh you if you let it.

TONIC. When you learn to cease resenting criticism, you are taking a corrective medicine that has put vigor into the world's strongest men.

WE SHOULD have demonstration lessons for teachers in the art of treating *parens iratus*. Get points from the department stores. To irritate a customer is an unforgivable sin. A mother is as important to a school. Without parents we would go bankrupt for raw material. It is good for you to avoid correcting a parent. You needn't prove her wrong or yourself right. The main thing is for her to learn that you are good mannered.

A SCHOOL nurse can prevent the spread of measles, but she can't stop the contagion of happiness that a radiant teacher makes epidemic and chronic.

WISDOM without punch is a clock without weights, springs or current. Energy without wisdom is a time-piece without hands.

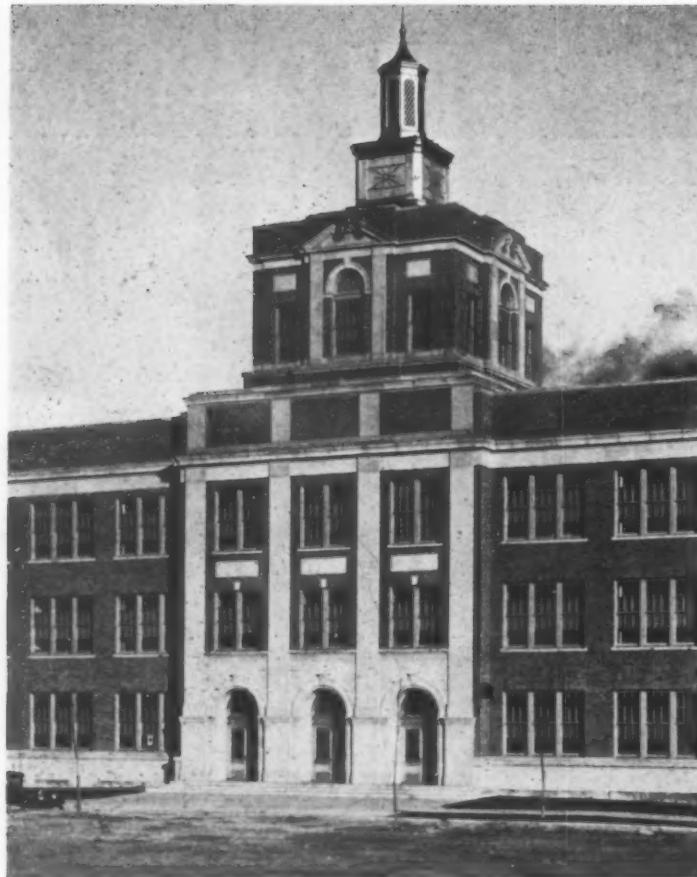
ONE reason why the progress of the world is so slow is that so many of us begin as if nothing had been done. It takes us a long while to begin using successful methods already tried and proved by others. To get the habit of doing this is one of the large aims of education.

DOING more for people does not seem to make them fonder of you but it surely makes you fonder of them.

Lou McCandless

THE SCHOOL PLANT





Junior High Meets Leisure Time Needs

By W. W. THEISEN
Assistant Superintendent of Schools
Milwaukee

THE Steuben Junior High School, Milwaukee, represents an attempt to incorporate the objectives and principles of the junior high school organization in its structural features. The territory served by the school, one of the better residential areas of Milwaukee, has developed rapidly within the past decade and is made up of citizens who appreciate the community value of good schools and take a justifiable pride in them. The neighborhood is essentially native American in type. Only a small percentage of the parents are foreign born. The largest single group is of German extraction and possessed of an unfailing faith in education.

The school has been developed as a part of the five-year building program of the board of school directors which is the outgrowth of a survey of the city's school building needs. The purpose in erecting the school was twofold—to provide richer educational opportunities for boys and girls of adolescent age and to relieve crowding in surrounding schools, especially in the senior high school serving the territory.

Unlike some cities Milwaukee has pursued a fairly conservative policy with reference to the introduction of junior high schools. Its first junior high school was organized in 1920. In 1928 the

board announced a policy in favor of continuing the gradual development of junior high schools but expressed itself as believing it unwise to proceed to a complete junior high school organization for some years to come, if ever. With reference to the matter of cost the board said that "the slightly increased cost over elementary schools is fully compensated for by the increased educational advantages offered to pupils in the junior high schools and the decreased cost for pupils who are given ninth grade instruction in the junior high school."

The Steuben Junior High School is the fourth modern strictly three-year junior high school erected by the board. In addition to these the city has erected three modern six-year high schools and one junior technical high school in recent years. Each six-year high school has a junior high school division. At present 46 per cent of all pupils enrolled in grades seven, eight and nine are a part of the city's junior high school organization.

The modern junior high school is characterized by its greater provision for individual differences of pupils in ability and inclination. By offering a richer program of electives, more individualized methods of instruction and teachers who are specially trained, the junior high school seeks to adapt

The new Steuben Junior High School contains two large gymnasiums—one for boys and one for girls. This view of a corner of the boys' gym shows a group enjoying the athletic facilities under the watchful supervision of an instructor.

its teaching more nearly to the abilities, needs and tastes of the pupil than is possible in the traditional school organization.

The first year of the junior high school in Milwaukee differs from the usual elementary school in the extent of its departmentalization under specially prepared teachers, the organization of classes on the basis of ability, the greatly enriched offerings in industrial and household arts, health education, music and greater opportunities for participation in the socializing activities of the school. Elective privileges begin in the second year and include the subjects of foreign language, science, art, music, industrial arts and additional English. In the final year only English and physical education are required. All other subjects are selected on an elective basis.

As expressed by Supt. Milton C. Potter, the demands of modern life have developed the junior high school. No longer is the aim of public education simply to impart an elementary knowledge of readin', 'ritin' and 'rithmetic; education still includes the teaching of these fundamentals, but it reaches now, as never before, into the future life of the pupil. It has come about that much of the character training formerly done by the home and the church is now thrust upon the school. Thus the school must see to it that habits formed in the classroom are those that will lead the pupil toward the best development of his character. Modern life, too, has demanded that education provide new types of training that will better fit the pupil to a complex civilization. More thoroughly trained teachers and better equipped schoolrooms enable the pupil to master the fundamentals in less time than was needed under the old school régime.

Of the host of functions the modern school in its capacity of "universal parent" is called upon to



perform none is equal in importance to character building. Life success is more than a matter of earning a comfortable living. More and more the citizen of today must depend upon his ability to win the confidence and respect of his fellow citizens. Those with whom he is thrown into contact desire to find in him a person who is agreeable, dependable, honest, sincere and cooperative. The school seeks to inculcate these fundamental qualities not only through the regular class activities, but through the extracurricular activities as well. These must be reckoned with in the construction of the physical plant.

The prediction has been made that within our span of life industrial efficiency will permit man to earn his living with relatively few hours' work each day. Hours of labor have been considerably reduced during recent years and the movement in that direction has not yet ceased. More and more leisure time is at hand. What shall the child do with it? The junior high school has come forward with a leisure time program. It offers reading, art, craft work, gardening, music, science, physical training, athletics, social contacts—a variety of activities appealing to the taste and abilities of all. Life in populous centers demands that the school put forth every special effort in its power



The library plays an important part in the school's attempt to prepare pupils for leisure time activities.

to make the proper recreational facilities available and to cultivate every facility for wholesome enjoyment and recreation. Educators and sociologists are convinced that if leisure time is well directed there is little danger of society's future. In planning the Steuben Junior High School a definite attempt has been made to meet the requirements of the leisure time objective of education.

Many things formerly done in the home are now more efficiently and economically accomplished elsewhere. Modern science is revealing the significance of various foods and the effect of different methods of preparing food is better known now than ever before. Girls study both the choice and preparation of foods in household arts classes. When it comes to buying foods, there is an opportunity for the girl to delve into the problems of the family budget. Whatever science and commercial organization may do for us in the future, the family budget can hardly become less important.

Occasionally the girls in the cooking classes entertain their mothers and other guests at luncheons and teas, thus gaining experience in serving meals correctly and attractively. By taking full charge of these affairs, the girls develop the poise and dignity that are so desirable for the hostess and home maker. However, if such teaching is to be provided appropriate laboratory, demonstration and practice facilities are necessary.

The little red schoolhouse of tradition may have been fairly satisfactory in its day when the curriculum was narrowly limited to the three R's. Little or no attention was paid at that time to such

matters as health, sanitation and safety in the construction of schools. There were no traffic hazards to force children to do most of their playing indoors. The wide open spaces offered free playgrounds to all. Subjects such as music, art, history and the sciences were closed books. Even though the education that countless numbers received during the short winter months lacked many of the qualities of a good third grade education of today, it was considered good enough for its time.

But under a law that requires children to remain in school for nine months of each year until they attain sixteen or eighteen years of age and under entirely different standards of social life a different type of curriculum is necessary. A program of education that embodies preparation for responsible citizenship of today, character training, health education, social development and preparation for worthy use of leisure time can no more be adequately carried out in buildings of the little red schoolhouse type than could a modern freight train pulled by its 350-ton engines run on the strap-iron rails which supported the first trains of the 1830's. If satisfactory results in terms of the demands of present day civilization are desired appropriate physical facilities must be provided. The modern school plant is an expression of the educational requirements of the present generation in physical form.

The Steuben Junior High School had its origin in 1929 when it began operation in temporary quarters as the Fifty-First Street Junior High School. The organization was hastened by the

highly overcrowded condition of the Washington High School which it was intended to relieve. Erection of the present structure was begun in 1930. The name of Steuben was given to the school in response to a popular demand among citizens, particularly those of German ancestry.

The building includes twenty-eight regular classrooms; a science unit of two classrooms; a small greenhouse; a storeroom; an industrial arts unit consisting of two shops, 30 by 72 feet and 44 by 62 feet, each designed to permit the teaching of three different types of exploratory subjects; a mechanical drawing room; a household arts unit consisting of one clothing laboratory, one food laboratory, a combination food and clothing laboratory and a homemaking room for demonstration and practice

uses; two music rooms, 25 by 40 feet and 25 by 50 feet, equipped for both choral and instrumental work; two art rooms; one study hall, 30 by 76 feet; one combination cafeteria and study hall, 50 by 96 feet; an auditorium seating 1,300 persons with fully equipped stage; a library, 26 by 77 feet; two gymnasiums, 48 by 66 feet each; a social activities room; a health unit; two teachers' rooms; and an office unit.

Ample storage facilities are provided for all departments. Special efforts were made to bring about economies in room utilization through the use of multipurpose furniture wherever possible, as was done in the case of the combination clothing and food laboratory room. This room may be used in alternate periods for clothing or for teaching.

Construction Features of Steuben Junior High School

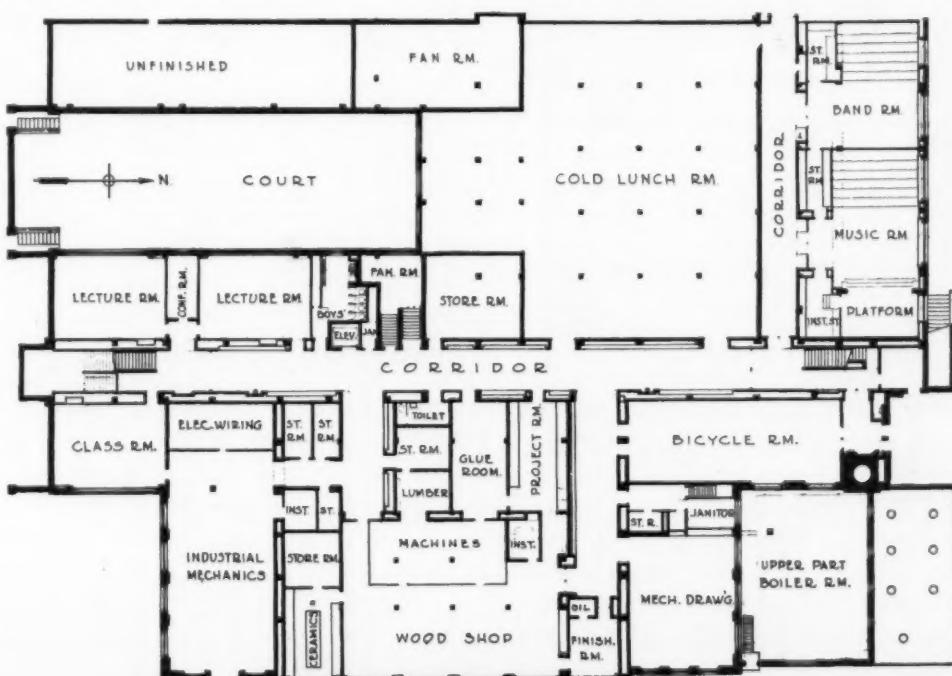
By G. E. WILEY, Architect, Assistant Chief of Bureau of Buildings and Grounds, Board of School Directors, Milwaukee

THE Steuben Junior High School is situated in a district in the northwest section of Milwaukee where real estate is held at a high valuation. The school site is consequently restricted, being less than one city block. As a result a compact type of architectural plan was necessary, and in order to provide as much playground space as possible on the south end of the plot the building was placed near the street on the north.

The usual "schoolhouse Gothic" was avoided, and a modern treatment somewhat reminiscent of early American public building architecture was adopted. This was held fitting for a building that was to bear the famous name of Steuben and to be in close proximity to Washington Park and Steuben Square. The exterior walls are of a gray,

pink, buff and salmon colored brick mixture, and resemble in color the early Dutch brick imported for use in some of the first brick buildings that were erected in the American colonies. The bricks are modern, standard size machine made bricks, and their only resemblance to the Dutch product is in color.

The entrance doors and frames are of the modern style, being made of aluminum. The leaded



The band room, music room, cold lunch room, bicycle room and wood shop are among the units on the ground level.

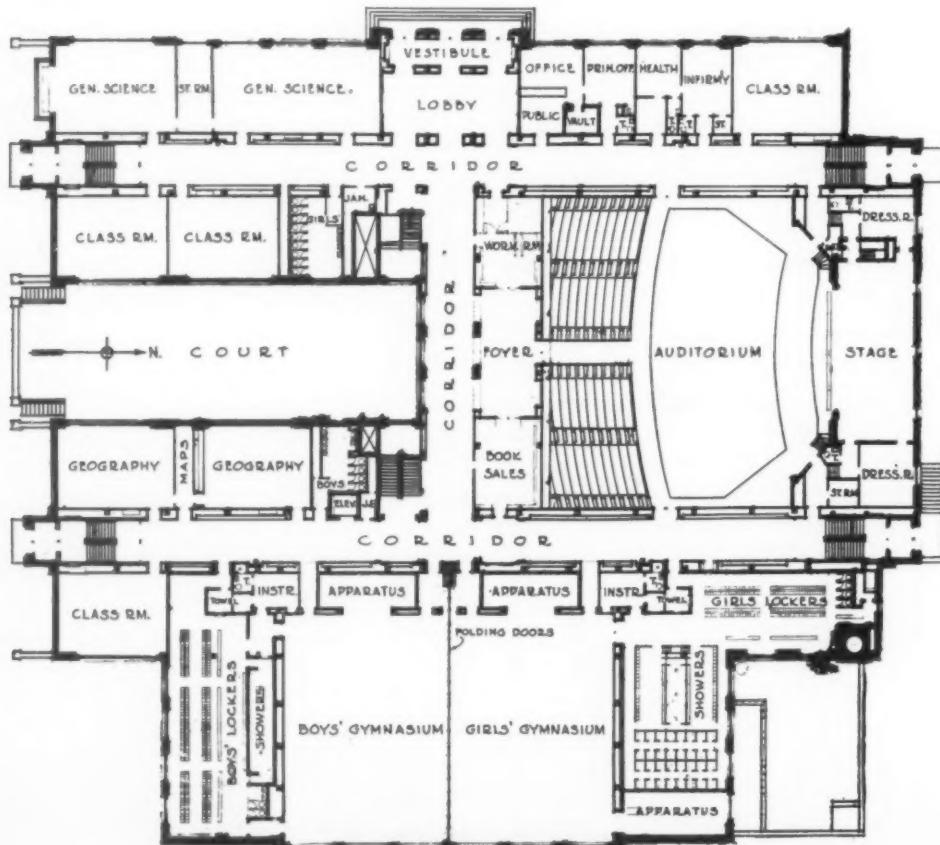


fan lights over the doors are of a colonial type. Over the main entrance there is a squat, square brick tower, surmounted by a small, square aluminum tower and lantern. This tower contains the "tower room," which is intended as a meeting place for pupil organizations. The facings and exterior

trim on the foundation and ground levels are of Indiana limestone.

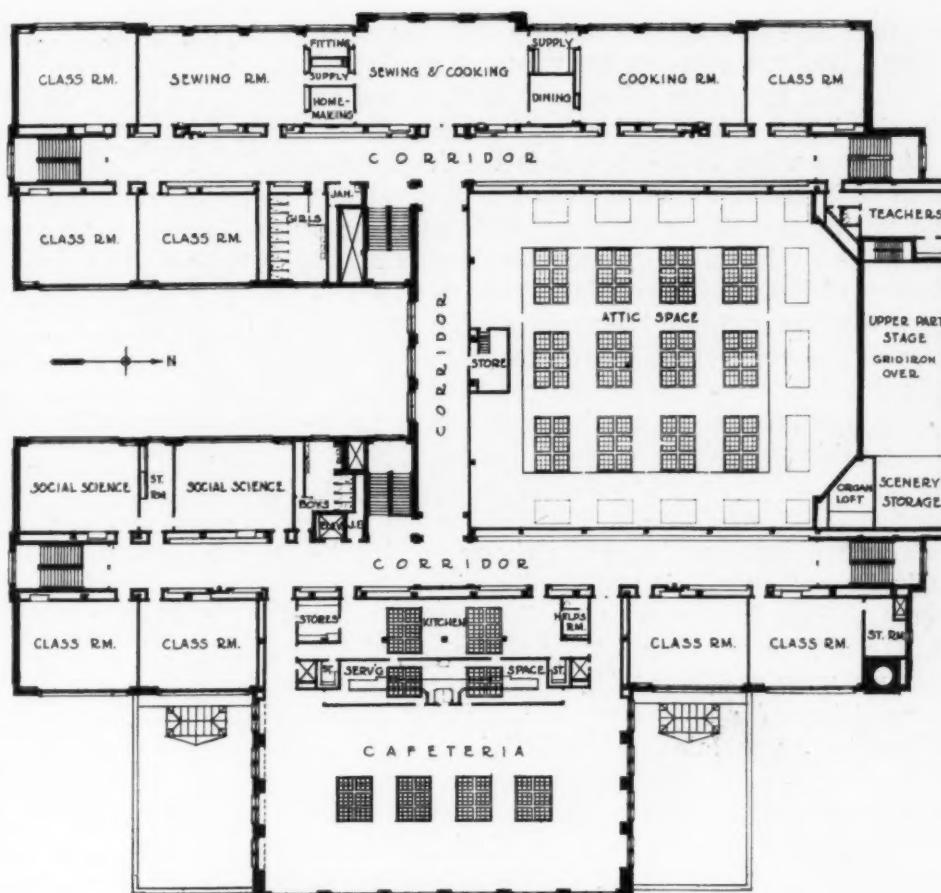
At the time the building was constructed the federal government was urging the extension of public works as an unemployment relief measure. In order to cooperate with this program and in

response to local demand, six school buildings were built, four of which were pushed ahead of their normal time for construction. Since one of the objects in the construction of these buildings was to relieve unemployment, and since the cost of building had dropped considerably, the quality and artistic character of the work was improved. Work was thus provided for those artisans in or-



The arrangement of the first floor is shown at the left. The picture at the top of the page shows the attractive tile murals and wainscoting in the corridors.

The third floor of the building contains the cafeteria, sewing, cooking and social science rooms, several classrooms and the upper part of the stage.



namental metal, leaded glass, ornamental plaster and tile and marble, which usually are the first to be affected in a depression and the last to be reemployed. As a result, the Steuben Junior High School has an individuality and cultural value not usually found in large city school buildings. These buildings usually are simply standardized units, serviceable to be sure, but with esthetic values sadly neglected.

In structural features the building follows the general current practice for fireproof construction. It has a reinforced concrete skeleton frame. Structural steel is used for the long span work in the auditorium and gymnasiums. The floor slabs are of concrete joist and metal pan construction. The exterior walls consist of eight inches of brick, an air space and four inches of hollow tile. The interior partitions are of hollow tile.

A difference of twenty feet in the elevation of the streets on each side of the building permits an additional story below the gymnasiums. The shops are segregated in this space and the music rooms are below the stage. There is a court 40 feet wide that opens on the south. Experience has shown that the classrooms facing this court are well lighted. The space below the auditorium is now used for bicycle storage, but it was originally planned as a future cafeteria in case the present cafeteria space on the third floor should be needed for instruction purposes. No great increase in enrollment is anticipated, however, as the building is situated in a residential section that already is well built up.

The main entrance vestibule and lobby are wainscoted with gray Missouri marble. Panels of green Swedish marble with vertical veining of green and gray are installed in the lobby as a background for memorials to George Washington and Baron Von

Steuben. The memorials will be installed at a later date. The first floor corridor is wainscoted with a faience tile. A series of small tile murals depicting figures and incidents of the Revolutionary period are installed in the west corridor where it intersects the center corridor.

The ground floor corridors are wainscoted with buff twin brick, and the second and third floor corridors are wainscoted with gray glazed brick.

Among the other attractive features of the building are the railings and stairs leading to the first landing, and the treatment of the foyer to the auditorium. The foyer is wainscoted full height in wood with recessed display cases. There are leaded glass panels in the auditorium entrance doors.

The library, which is on the second floor, has a typical colonial type elliptical arched entrance door on the axis of the center corridor. This door is treated with leaded glass side lights and fan light and forms an effective entrance to the room, which is of colonial design. The woodwork in this room is enameled in a light shade of gray. The sides and backs of the recessed open shelving are of stained knotty pine. The library floor is of linoleum tile, laid in alternate gray and green squares. The ceiling is acoustically treated. The librarian's desk was especially designed by the architect, and combines both a charging desk and the card catalogue. The chairs and tables are regular stock models,

but they have been slightly modified to fit the room. They have been given an early American stained finish. The center corridors on this floor and on the third floor are treated as exhibition galleries.

An innovation in this school is the fabric covered tack frieze, which in certain rooms extends completely around the room and covers the space from the level of the top of the blackboard to the bottom of the picture molding. This was formed by giving the partition tile a coat of brown colored plaster and nailing wall board over it. A covering of painted burlap was hung on the wall board. It is possible to tack up illustrative or reference material on this type of wall without damaging it.

Large Groups Handled Quickly in Showers

The combination of a group shower and individual shower stalls is used in the girls' shower room. All the showers are controlled by the attendant from a raised control table at the end of the group shower, and from this point she has complete supervision of all showers and dressing stalls. There are no curtains on the individual showers and dressing stalls as it has been our experience that these are unnecessary. The pupils are allowed to choose the type of shower they wish. At the beginning of the school year the pupils are about equally divided in their preference, but before the first semester is over the majority of them turn to using the group shower. Under this arrangement classes of from seventy to eighty girls are easily handled in the short time allowed for showers and dressing.

The boys' shower is a typical group shower arrangement. It has an opening and control valve near the instructor's office.

The gymnasium is divided into boys' and girls' sections by an electrically operated folding partition. The walls and the folding partition are wainscoted with cork, and the upper part of the walls are covered with an acoustical material. The gymnasium windows are of steel sash and the interior woven wire guards are placed flush with the face of the wall. There is a space between the guards and the sash for all heating pipes, radiators and sash operating devices. This arrangement has proved so satisfactory that it has been adopted for all gymnasium windows in buildings designed by the board's architectural division.

Cost data on this school cannot be used in comparison with costs in other sections of the country as the Milwaukee board's minimum wage scale has kept the cost of labor considerably above the general level. However, the cubic foot cost of this building was approximately \$0.27. The building will accommodate 1,600 pupils, but some expansion is possible without adding to the structure.

The Why and Wherefore of the School Shop

The popular conception of school shops is generally wrong, in the opinion of Wilbur H. Lynch, superintendent of schools, Amsterdam, N. Y. A school shop does not exist for the purpose of making carpenters, sheet metal workers or printers. It could not make them if it would because a school shop can only approximate actual conditions.

For a large group of boys, the school shop is an opportunity for finding out things, Mr. Lynch points out in an article in *New York State Education*. The boy finds out what he can or cannot do, what he likes or dislikes in the way of shop work, and the teacher finds out much about the boy's capabilities and qualities.

Many boys, especially in manufacturing communities, are obliged to leave school and go to work as soon as they are legally able to do so. Such boys find employment in local industries and properly should be encouraged in such a course. The school should select its shops accordingly. In a textile town, for example, a textile shop allows a boy to explore all branches of the industry. He learns to weave, to dye and to buy and distinguish yarns. He gets an opportunity to design patterns for carpets and rugs and see them woven. He learns how to make repairs on looms and to find out and correct imperfect work. A boy so trained not only explores the textile industry, but even more, he gets a start that will mean a larger beginning wage. The textile shop, too, can appeal to the boy's ambition by showing concretely the desirable and best paying positions in the industry—it can teach him what to work toward.

One of the tangible results of the boy's explorations in industry is the time and effort saved to the employer. Every vocational and continuation school should be an employment agency for its pupils. It should be so reliable an agency that employers will give it their confidence and support. Through the boy's efforts to explore industry, the school has learned about the boy as it could have done in no other way.

Ways to Cut School Costs

In order to assist school administrators to effect economies without injuring fundamental educational services, the U. S. Office of Education is issuing a series of publications on potential economies in school administration. Each gives actual reports from the field on how these particular economies are being put into operation in school systems throughout the country. Single copies will be supplied free by the Office of Education as long as they last.

The list of the publications is as follows: (1) Larger Units for Educational Administration, Pamphlet No. 45; (2) Economies Through the Elimination of Very Small Schools, Circular No. 117; (3) Economies in Class and School Organization, Circular No. 113; (4) Techniques for Teaching Large Classes, Circular No. 114; (5) Correspondence Courses for High School Students, Bulletin 1933, No. 13; (6) Operation and Maintenance of the School Plant, Circular No. 115; (7) Centralized Purchasing and Distribution of School Supplies, Circular No. 112; (8) Economies Through Budgeting and Accounting, Circular No. 116; (9) The Education of Teachers and the Financial Crisis, Circular No. 110; (10) Economies in Higher Education, Carnegie Foundation, and (11) Bibliography on Education During the Depression, Circular No. 118.

Keeping Up School Appearances Is Not Necessarily Costly

By

C. F. GREEVES-CARPENTER
Landscape Architect,
Altadena, Calif.

IT IS becoming more and more important that school grounds be neat and well kept. The condition of the campus is a certain external indication of the school's standing in the community.

Shabby looking tree growth should never be tolerated. Yet many school board directors try to dodge the expense of caring for trees, either in the belief that things may be a little more normal next year or on the extremely fallacious theory that the trees have got along all right so far and that they should continue to thrive. Either assumption, however, is somewhat presumptuous. The institution's financial outlook may be better—and we all hope it will be—in 1934, but trees, like children, cannot be neglected and expected to remain healthy. The longer the question of tree expense is shelved, the greater will be the cost in the long run.

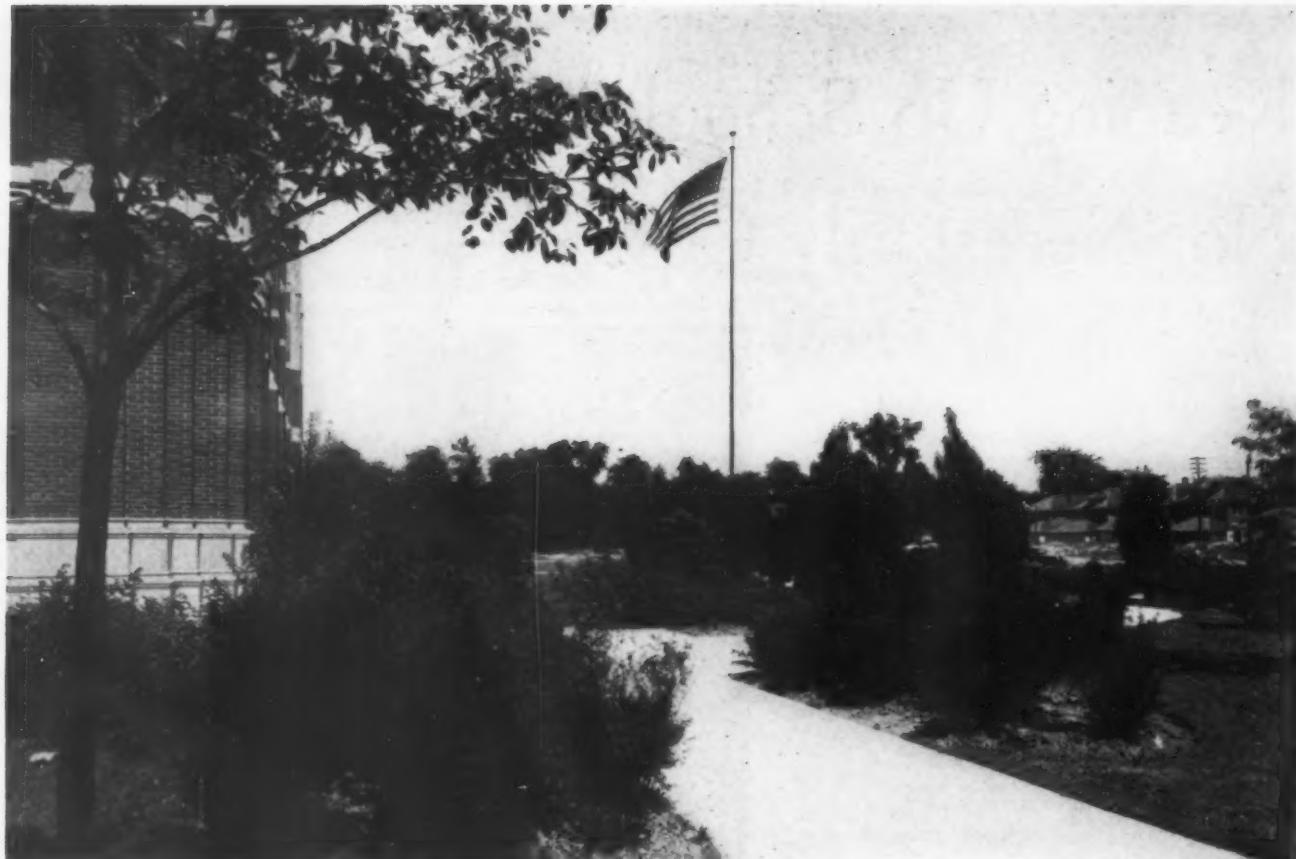
Many persons are under the impression that tree maintenance is expensive. It is not prohibitive, however, if intelligent care is given from the day of planting. Trees are not very demanding. They simply need proper feeding and watering, protection from physical or mechanical injuries, some pruning and prompt treatment for any minor injury.

Correct feeding and watering is of paramount importance in the maintenance of healthy tree



growth. Every third year deciduous trees should be fed with a well balanced commercial fertilizer. This may be purchased at a fertilizer works or garden supply house and applied by the general gardener.

A series of holes should be bored under the outer extremities of the branch spread. They should be 18 inches deep and 2 feet apart and should be filled with the tree food to within 3 inches of the top. The sod should then be pushed back in position. This method of feeding trees places the fertilizer in an available position for the roots. Well rotted stable manure may be used around evergreens as a mulch but that method of feeding is not recommended for deciduous trees. The principal expense of feeding is the time that



Neat and well kept grounds are an external indication of the school's standing in the community. The campus of Durfee Intermediate School, Detroit, is always well groomed.

is necessarily consumed in carrying on the work.

Ground should be thoroughly soaked or puddled at least once every two weeks during seasons of drought. Sprinkling is ineffective since most of the moisture is absorbed by the grass roots. A galvanized iron guard, one foot high, surrounding the trunks of trees is another form of inexpensive tree insurance. This device protects tree trunks from possible injury by lawn mowers.

The pruning of established trees is necessary only when they have badly diseased limbs or when branches have been broken by wind or ice storms. This phase of tree work calls for the attention of a tree expert since much damage can be done by an amateur gardener with slight knowledge of tree growth.

Injuries often occur which break through the outer bark and expose the tender cambium layer. First aid can be given immediately without any expense other than the time involved. A sharp chisel should be used to remove all loose wood and bark and to shape the edges of the wound so that it assumes an elliptical shape with sharp points at top and bottom. The edges may be painted with shellac and the central portion of the wound with an antiseptic tree wound paint. After one or more growing seasons the tree will heal of its

own accord. When first aid is not applied a large cavity inevitably results and the services of a tree surgeon become essential if the tree is to be saved.

Spraying tall trees for the control of insects and fungi must, on account of the necessity for power spraying equipment, be done by experts.

Dusty Light Bulbs and Fixtures Waste \$300,000,000

Approximately one billion dollars was spent in the United States in 1932 for the purpose of getting artificial light. Schools naturally accounted for a goodly portion of this sum. Adequate and intelligent maintenance of equipment would have reduced the nation's total lighting bill in 1932 by approximately one-third, which would have meant a saving of approximately \$300,000,000, according to a statement made by Samuel G. Hibben at the Conference on Economics of Applied Lighting.

"The maintenance of lighting equipment, which consists mainly of keeping the globes and reflectors clean, is often neglected, except in some buildings where the lighting installation is so extensive that every detail of efficient operation is taken into consideration," Mr. Hibben said.

He suggested that steps be taken by users to guard against losses resulting from low voltage, improper or aged lamps, dusty reflectors, dirty walls, dirty ceilings and empty sockets.



The High School Cafeteria as a Self-Supporting Unit

By DOROTHY E. SCHUMANN, Cafeteria Manager, White Plains High School, White Plains, N. Y.

WHITE PLAINS, a city in Westchester County, about twenty-five miles from New York, with a population of 37,000, is proud of its four year old senior high school. Fortunately for the 1,600 pupils involved, the board of education and the architect who planned the beautiful modern building recognized the importance of lunch hour at school and provided a cafeteria worthy of the building.

The dining room, which is clean and light, forms with the kitchen a separate unit on the main floor at one end of the building. Each table seats six and 490 pupils are accommodated at a time. During three lunch periods—11:15 to 12:00, 12:02 to 12:47 and 12:50 to 1:35—almost 1,500 persons can be served. Since the school is situated quite a distance from the main part of town, lunch permits are granted only to those pupils who live within a radius that enables them to go home and return without possibility of lateness. All others must come to the lunchroom, even those who bring their lunches from home. About 222 pupils have lunch permits and of the 1,368 pupils in the cafeteria about 1,000 to 1,200 buy their whole lunch or supplement what they have brought.

Since the new lunchroom was opened in September, 1931, there has never been a deficit. On the contrary, a nice working capital has been established and the lunchroom is almost entirely self-supporting. The board of education purchased all the original equipment and pays for gas and

electricity and for the service of one janitor assigned to cafeteria work. Otherwise all expenses for food, salaries, replacement of equipment and insurance are paid by the cafeteria. Prices, too, are being reduced to the minimum to meet the needs of the pupils.

The success of a school cafeteria depends upon the manager's knowledge of good food, her thorough acquaintance with the art of purchasing and preparing it and her ability to sell it. That the White Plains High School cafeteria is not in the red is due to the fact that only the best of everything is purchased. Furthermore, the food is prepared so that it comes up to the highest standards of modern cookery. Finally, it is sold at a price in keeping with the pocketbook of today.

The proof of the pudding is in the eating and pupils know it. Every dish served in the lunchroom should be tasted and approved by one who sanctions nothing less than the best. No food goes out to the steam table unless the cook and I enthusiastically agree that it is a delicious dish and that we should be willing to set our product next to that of any high class restaurant or hotel, be it simple baked beans or fancy dessert.

When these standards are maintained, food sells itself, but if food just good enough is served sales go down immediately. It is well to remember that volume of sales with low prices is far better than fewer sales with high prices. It is foolish to insist that a salad or a dessert should sell for 10 cents or

7 cents if pupils have only 5 cents to spend. It is better to sell 300 portions at 5 cents than to sell only 100 at the higher price.

We are frequently asked how we still make ends meet with food going up every day. The answer is that we still use the same recipes without cutting down on butter, cream and other expensive ingredients, but we fit the price to the present need. If the cost of their lunch is in keeping with the present hard times, enough pupils will buy their lunch rather than carry it from home. Now, more than ever, the price must be low and the quality must be high. Otherwise the lunchroom would soon be serving only sandwiches and milk which do not carry the overhead.

The task of a school catering department, therefore, consists of offering a properly balanced, well prepared and inexpensive noonday meal which meets the food values and dietetic demands of pupils. High school pupils have definite likes and dislikes and it is more difficult to put over an educational food program here than it is in the grade schools where it is possible to use posters and give personal help in selecting trays. With high school pupils one must consider food from the esthetic point of view. In White Plains High School, where as many as 1,200 pupils are fed, there is no opportunity for tray supervision. Furthermore, high school pupils are not very amenable to suggestions. Our hope of educating them to our own knowledge of what they should eat lies in placing before them day after day a proper menu of well prepared food.

Popularizing Vegetables

It has been my experience that it is better to have few choices each day with great variety during the week and few repetitions for several weeks. If a pupil knows that certain dishes will appear on the menu every day, no matter how much he thinks he likes this dish, its popularity begins to wane after a while. It is much better not to include it too often and maintain his interest. In this way pupils learn to like foods other than their favorites.

At first there was little interest in the food served in our lunchroom. It was just a place where one could get sandwiches and ice cream. It seemed almost impossible to interest the pupils in hot dishes and vegetables. But day after day we kept placing before them the food we thought they should eat and gradually more and more pupils would take a chance on it and proceed to tell others how good it was. Soon we found we were preparing more hot dishes and fewer sandwiches. Consequently it became necessary to reorganize the staff to meet the growing need for more and more food. Our greatest problem was with vegetables. No one seemed to care to spend 5 cents for a dish

of fresh vegetables. To the cook's horror I decided one day to serve a vegetable plate of four fresh vegetables including mashed potatoes and no other hot dish. Surprising as it may seem, it sold pretty well and more pupils then became interested in buying separate vegetables.

Much of our success in popularizing vegetables is due to the fact that we do not begrudge the time spent in preparing fresh vegetables. We cook according to the principles of vegetable cookery, using plenty of butter or some special sauce. Canned vegetables, as we know, have as much food value, as many vitamins and minerals as does the fresh product, but the flavor is not always as good. Is it not better to clean three bushels of spinach and sell every bit of it than to open merely a few cans and sell hardly any?

Twenty Cents Pays for a Lunch

Our daily menu consists of one soup, one entrée, two or three vegetables, two or three varieties of sandwiches, two salads, one or two desserts and ice cream, fruit, milk, rolls, cookies and almost every day a homemade muffin, cinnamon bun, biscuit or other hot bread. No candy or baker's cupcakes or sliced cakes are served. All baked products, including pie occasionally, are homemade. The average lunch runs somewhere between 15 and 20 cents. Soups are 5 cents. Most sandwiches are 5 cents although a few, such as tunafish and celery and salmon and celery, are still 7 cents. Vegetables are 5 cents, meat and potato plates are 15 cents, other entrées are 10 cents, salads are 10 cents and 12 cents and most desserts are 5 cents. Ice cream is sold either in 5-cent or 10-cent portions, but we serve 5-cent ice cream only about twice a week since it spoils the sale of any other dessert that day. Ice cream is a nourishing food but pupils must learn to eat a variety of foods and the only way to teach them is to give them variety. It is an interesting point that our boys and girls are rather reluctant to try new things and until a few do so, many will not even read the menu but just take the usual mashed potato and gravy, ham or lettuce sandwich and ice cream or chocolate pudding.

Food must be well prepared or pupils will pass it by. This brings us to the importance of standardized recipes. Each time a dish is made, it should be exactly the same as it was the time before. If a person chooses creole spaghetti today and finds it to his taste, he will order it when it appears on the menu again. If the next time it is a little different, his faith in the product is shattered. On another day, realizing that he doesn't know just what it will be like, he hesitates. If the product is always the same, the sale of that product is assured once its reputation has been established. Recipes

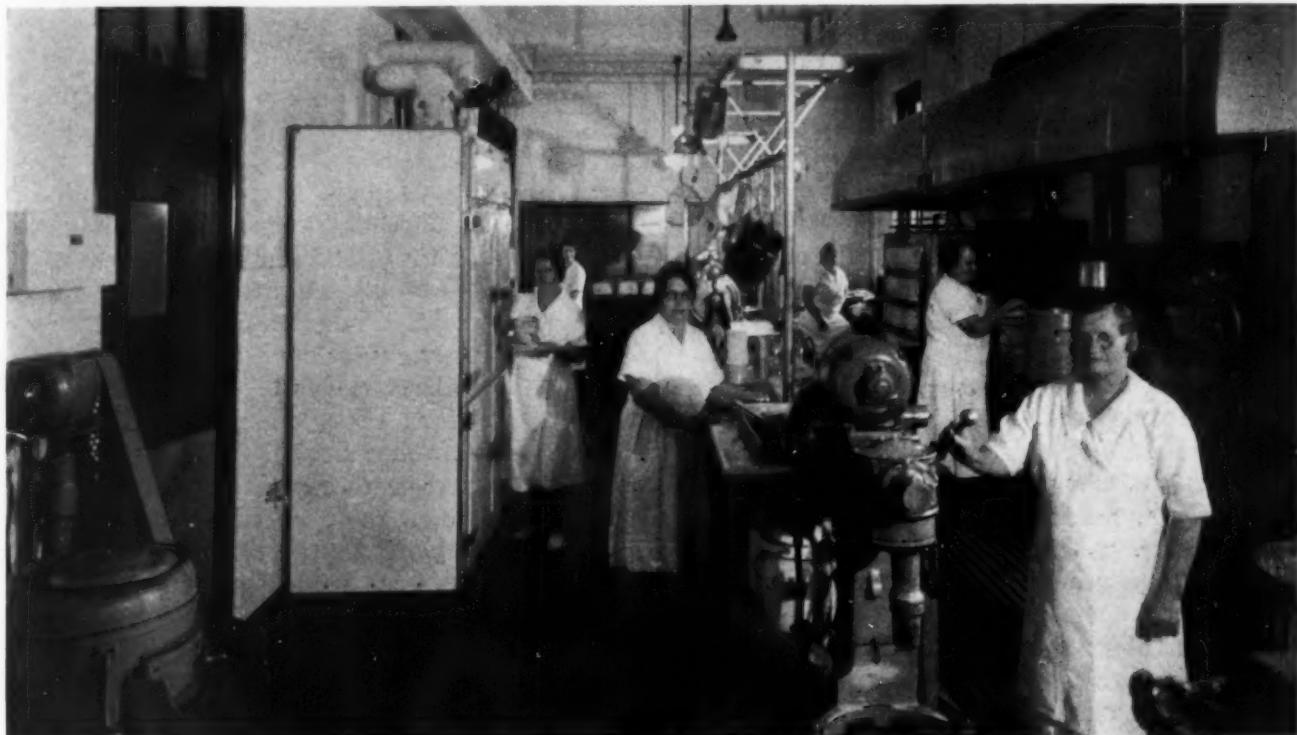
should be standardized and help should be taught to follow them carefully, never adding or subtracting anything according to whim.

No coffee is served to pupils and since there was no demand for cocoa we have given up serving it. We sell 420 to 500 individual half bottles of milk daily and 40 to 70 quarts of cream soup. We make 900 to 1,000 sandwiches with plenty of butter and filling. Meat is served not more than twice a week, and we use from 75 to 90 pounds. Consumption of vegetables has increased and two bags of potatoes disappear easily in one day.

It is economy to buy the choicest plain foods

on the part of the manager, constant checking and insistence on getting the best are necessary.

Financial affairs of the school cafeteria are handled as are those of any successful business. Every bill bears the O. K. of the manager. Monthly statements are checked over with daily bills and checks are sent out once a month. A bonded cashier deposits money in the lunchroom's bank account every day and the receipt is filed with the statement of number of sales and cash received for that day. I keep a record of the food used each day with overhead cost so that I can compare expenses with daily receipts. On this same sheet I have the daily



The kitchen, a long narrow room behind the serving counter, is well arranged as to working units. Except for passageways, the equipment is one continuous line across both sides of the room and down the center.

for the school lunch, that is, the best of everything but not the fanciest. School children are not interested in mushrooms, shrimps and other delicacies. In White Plains we buy locally if possible and the school gets a special price. Groceries are ordered from wholesale firms every other week. Since our storeroom is small, consignments for the year are given in few instances. Deliveries of the day's fruit, vegetables and milk are made early in the morning and the cafeteria staff reports for duty at eight o'clock.

Since the school is too far from the markets for us to shop personally very often, it is necessary to keep in constant touch with prevailing prices on seasonal foods. Reliable merchants soon realize that the cafeteria manager knows exactly what she wants and that they cannot fall below her standard in any way and be accepted. Constant supervision

menu, amounts of each dish prepared and notes as to whether any was left over or if there was a shortage. This is an excellent help in getting food preparation down to a fine point with little left over. The next time that dish is served I can refer to my records and judge accordingly.

We have almost no problem of leftovers. We note how much of the hot dish and how many sandwiches were taken each period and see that there is more or less the same for the next lunch group according to its size. Then, if necessary, we make more for the last period. We are never left with more than twenty sandwiches, which are generally bought after school, a few quarts of soup and one small roast, any of which can be utilized the next day. Often such small quantities are bought by the help for their supper.

All bills are kept on file and monthly statements

are issued, a copy of which is given to each member of the cafeteria committee at the monthly meeting. This committee consists of two members of the board of education, the principal of the school, the manager and the commercial teacher, who signs all checks and deposits the money. These statements show exactly how much money was made or lost during the month, all expenses and allowances for depreciation of equipment, number of sales, inventory and everything necessary to determine just how the cafeteria stands to date and why.

Right Type of Personnel Highly Important

In the White Plains High School a cafeteria staff of eleven persons is employed, including the cook, an assistant who prepares vegetables and hot dishes, a pastry cook who also makes the salads and three sandwich makers. One of the latter continues to make sandwiches throughout the lunch period while the other two stop at ten o'clock to set up the counter, dish up desserts and serve at the counter and steam table during the lunch periods. We also have five part-time workers who come at eleven, first wrap sandwiches for about three-quarters of an hour, wash the pots, then go to the wash room to handle the dishes, finishing with the others at four o'clock.

The right help is just as important in school cafeterias as in any other restaurant work. It rests with the manager to see that she has a well organized and well trained working force. Constantly changing help means that there is something wrong somewhere. It is important that members of the force work as a unit, cooperate with the manager and each other and take a real interest in the work and the health of the pupils. They should be contented, quick, conscientious, not jealous of each other and good sports in emergencies. These qualities may be developed once intelligent, reliable persons have been chosen. We have all women help and one janitor.

The following principles should, I believe, be borne in mind in the handling of the personnel:

One: Hire intelligent people who have some "kitchen sense" and are swift moving. The school cafeteria is no place for slow women.

Two: Train each one yourself to the job that she is to do.

Three: Instill in them immediately a strict adherence to your high standards so that nothing less than as nearly perfect a product as possible meets their approval as well as your own. Constant supervision and checking are necessary for this.

Four: A fair division of labor is necessary for a contented household and willing teamwork.

Five: Avoid overspecialization so that if one is absent, another can take her place.

Six: Treat your help as human beings. Never reprimand one employee in front of another.

Seven: Encourage suggestions from the help to keep up interest.

Eight: Supply each worker with a written schedule of each day's duties, tabulated in order until the routine is established.

Nine: Give them a general idea of the coming week's menus on Friday of each week and an exact menu each afternoon for the following day with recipes and special instructions.

Ten: Know how to do every job yourself and how long it should take to do it.

Eleven: Insist on cleanliness and neatness in both work and personal appearance. Clean uniforms should be required and hair nets. You may lose sales due to the appearance of some worker.

A cafeteria of the size we are operating should have, I believe, regular hired help rather than pupil help. Pupils could not accomplish all the work. They are unreliable and need constant teaching. In the last two years, however, we have used some pupil help to supplement the regular force. This was the result of a discovery that many pupils who could afford neither to buy lunch nor to bring it from home were anxious to work for it in the cafeteria. We have really created many odd jobs for such pupils whose number is increasing daily. Two pupils serve ice cream each period, one replaces the milk on the counter between periods, others see that glasses, silver and napkins do not run short. Some wrap sandwiches for fifteen minutes to an hour. Each of these pupils receives 25 cents and he must spend it all for lunch. We know that they are getting a good substantial meal and are not saving 10 cents daily for something else.

How the Boys Help

Some of the boys help the janitor straighten chairs and wipe tables between periods. This makes it possible to keep the room looking neater than when one man had to cover the whole room quickly during the time one group was leaving and another was coming in. Others carry trays from the washroom which enables the women to continue their dishwashing and drying without the necessity of seeing how the trays are holding out. Our efforts to help these children are rewarded by their fine spirit, ambition and improvement in appearance as a result of proper nourishment.

There is always the problem of handling large numbers of pupils without having them wait in line and without overcrowding the room. Teachers are in charge of "lunch groups" consisting of from ten to thirty or more pupils who go to a certain room at the beginning of each of the three lunch periods.



Everything set for service! The daily menu consists of one soup, one entrée, two or three vegetables, two or three varieties of sandwiches, two salads, one or two desserts and ice cream, fruits, milk, rolls, cookies and bread.

Teachers bring in their groups at intervals of two or three minutes, depending on the size of the groups, so that no one waits in line too long and everyone has a full twenty-five minutes or more to eat his lunch. During the spring and fall months pupils are allowed to go out on the campus after finishing lunch. They leave by the rear cafeteria door and must remain outdoors until the end of the period.

In cold or rainy weather, some arrangement must be made so that those who come in first leave in time to allow seats for the latecomers. Therefore, the first five groups return with their respective teachers after a twenty-five-minute interval. When one of these groups has finished a whistle is blown, a card bearing the room number printed in large numbers is held up, and the pupils belonging to that group pass to the room to study.

A Hostess Solves the Discipline Problem

Keeping order in a large lunchroom is a difficult matter. It is the pupils' only period of relaxation during the day and they are apt to be a little difficult to keep in order, especially when they must stay in the room perhaps fifteen minutes after they have finished eating.

This perplexing problem of cafeteria supervision has been solved by appointing a special hostess to replace the teacher supervisors. Working with her is a pupil cafeteria committee. The qualifications for a position of this kind are exacting. The hostess must be fond of the pupils, sympathetic and understanding, but she must put up with no nonsense. She has the right to give a certain number of days' detention to any one who does not conduct himself properly in the cafeteria.

A cafeteria committee for each period, made up of pupils of high scholastic standing, assists her. A captain is in charge of five or six boys or girls who are assigned to different posts after finishing their lunch. One watches to see that pupils do not break into the line; one directs traffic at the counter; another stands at the door to see that all enter in orderly fashion and do not wander around the halls.

Pupils at different parts of the room have authority to give directions for order as does the hostess herself. One pupil blows the whistle and holds up the card with the room number designating the group that is to return to the study room. No pupil is allowed to leave the cafeteria to go to lockers, boys' or girls' rooms or office without a signed slip from the hostess or a member of the committee. This system of supervision relieves the teachers for other important work and it has been our experience that it is economical for the school to have a hostess.

The successful operation of the White Plains High School cafeteria is partly due to the arrangement of the dining room and kitchen. Large windows face on two sides of the dining room and there are skylights above. Tables have brown linoleum tops that are neat and easily cleaned with a damp cloth and a little lemon oil for polishing. The floor is covered with tan and black linoleum. On one side and running half the length of the room is a double counter with steam tables. Forming a double line in the center, pupils take their trays, silver and napkins and then pass to right or left selecting their food and paying with cash at the end of the line. A cashier at either end checks the trays and takes the money.

Better School Practices

High School Develops a New Kind of Annual

"The Treasury" of Alexander Hamilton High School, Los Angeles, embodies the solution of many problems attendant upon the school annual and at the same time preserves its most popular and worth while features.

It is a memory book or, as its name suggests, a treasury containing under one cover all of those items associated with the individual pupil's high school career. There are pictorial records of pupil activities—sports, clubs, plays, musical productions and R.O.T.C. camps; individual pictures and class groups; autographs; campus and faculty pictures, and snapshots.

"The Treasury" is built as the pupil progresses through his high school course. Each pupil buys as much or as little "treasury" as he desires. There are no campaigns; all purchases are cash transactions made at the business office. The initial purchase in each instance is an album style cover, a filler, three division sheets—sophomore, junior and senior—and one section.

The filler remains as is for as many years as desired and consists of 1 Ex Libris, 1 fly sheet, 1 four-color frontispiece, 1 title sheet, 7 pictorials of campus and buildings, 1 printed page, "Life is a memory book, etc.", and 2 sheets of pictures and messages of administrators. The filler is stapled to facilitate handling and punched to fit the cover, a post binder embossed in the school colors.

The first section of the current year contains 51 pages of sports, clubs, classes, senior pictures, student body officers, snapshots, autograph sheets and sheets for pasting in snapshots. As many sections as desired are printed during the year and the individual pupil may purchase as many sections as he can afford. Each section, stapled and punched, is filed behind the proper division sheet.

As his "Treasury" grows, the pupil may exchange the binding posts for longer ones. At the close of a pupil's high school career his "Treasury" will be an accumulation of material telling in order the story of his high school experiences.

In order to introduce this innovation to the student body a show case display illustrating the growth of a "Treasury" was run for one week. The date of sale was announced and

a week was set aside during which purchases might be made. The entire issue was sold within two hours.

The number of covers sold indicates the quantity of each future section to be printed. A reasonable number of covers, original fillers and subsequent sections are kept in stock to supply later orders.—THOMAS H. ELSON, Principal, Hamilton High School, Los Angeles.

Analysis of Soaps Determines Best Value

A recent experience in the purchase of toilet soap led to the discovery of some interesting facts in this phase of supply purchase. Each year, it had been noticed that although the stated specifications of various bids on liquid toilet soaps were approximately the same as to soap content, there was a considerable range in price. Last year when supply bids were called, samples of the toilet soaps were also required, with a statement of the soap content and the delivered price.

Ten different samples from nine different houses were submitted. As usual, there was so wide a variance in price that it was decided to have a chemist analyze these samples. Six of the ten samples were discarded because of cloudiness, sediment or excessive price. Two of the four remaining samples were from one company. These, the salesman said, were their quality and their competitive soaps. The prices, stated soap content and quantity bid were as follows:

Sample	Stated Content	Gallon Price	Size Drum
1	40%	\$1.25	65 gal.
2	40%	.81	65 gal.
3	42-43%	.80	65 gal.
4	36%	.56	55 gal.

The above table shows a price variance of from \$1.25 per gallon as a maximum, down to \$.56 per gallon as a minimum. Listed content varies from 43 per cent down to 36 per cent. While the lowest priced soap is listed as having the lowest content, the highest priced soap is not the highest in stated content, but approximately midway between the two extremes. The

difference between the quality soap and the competitive soap from the same firm was stated by their salesman to be one of glycerin content.

The chemist's report showed that in actual soap content the samples fell short from eight to ten points each of equaling the stated percentages. Each sample contained a small percentage of glycerin but none over one-half of 1 per cent. Of the two samples submitted by the same company, the so-called "competitive" soap actually tested seven-tenths of 1 per cent higher than the "quality" soap.

Samples 1 and 2 were both short of the stated content and were, as the chemical analysis showed, practically the same soaps. However, there is a spread of \$0.44 a gallon in price. This means that the "competitive" soap can be bought for 54.32 per cent less than the "quality" soap, while actually the "competitive" soap contains the most soap by seven-tenths of 1 per cent.

Further study reveals that the cheapest soap of the group is that marked Sample 4.

The "competitive" soap, Sample 1, would have been expensive even though it had contained the claimed glycerin content. At the present market price of glycerin, it would be much cheaper to purchase several gallons of this product and mix with the soap. Four gallons of glycerin added to the 65 gallons of soap would bring the content to over 6 per cent, and the cost would be \$10 for this addition if the glycerin was purchased at a price of \$2.50 per gallon. However, the difference in the cost of the "quality" soap and the "competitive" soap would total \$28.60. This would make a saving of \$18.60 by purchasing the "competitive" soap and adding glycerin to it. In addition to this, there would be a gain in quantity of soap from 65 gallons to 69 gallons.

The actual outcome of the foregoing was the purchase of the soap marked Sample 4, at a price of \$0.56 per gallon, but the agreement was written into the order that this price was to vary in direct proportion to any variance in actual soap content that chemical analysis might show in the soap as delivered.—C. L. CRAWFORD, Superintendent of Schools, Wagner, S. D.

If you have practical suggestions that might help other school administrators *The NATION'S SCHOOLS* will be happy to have them for inclusion on this page



Adequate Light Saves Pupils' Eyes

By WALTER STURROCK
Illuminating Engineer, Cleveland

LIIGHT of sufficient quantity and of proper quality, free from glare and harsh shadows, is essential for all work places. Well designed lighting in schoolrooms aids the pupil in doing better work because it permits him to see detail and to work with greater ease and with minimum eye fatigue.

An indication of the extent of defective vision among young people and its correction is found in the following data compiled from reports by school authorities of thirty-four large cities in eighteen states on 483,154 public school children and on 46,751 students in thirty-nine normal schools, universities and colleges: public schools—defective, 22 per cent; corrected, 13 per cent; uncorrected, 9 per cent; colleges—defective, 40 per cent; corrected, 18 per cent; uncorrected, 22 per cent.

These reports also indicated that probably not more than 5 per cent of children five or six years old have defective vision, while at least 25 per cent

of those graduating from high school have defective vision. It is evident, therefore, that at least one pupil out of every five will acquire serious eye defects while getting a public school education. Defective vision handicaps a person throughout his entire life and places an extra burden on him during his periods of study. This extra burden may so handicap a pupil that he will require a year or two more than the prescribed time to complete his course.

Bulletin No. 7 of the Eyesight Conservation Council states, "If each of the six million retarded children in the United States were forced to drop back only one year, the cost to the country would be \$390,000,000. The public school system spends this amount each year in order that those children may have one or more years to complete their education. At least one-third of this amount or \$130,000,000 is lost annually because the eyesight of the children is neglected. And after all this large amount is but a small part of the total loss to the child and to the state when consideration is given to the future efficiency, lowered earning power and less competent service of the individual as an economic unit of society."

Eyestrain, the most common of all eye troubles, leads to more discomfort and disability than all other visual defects. It is a by product of modern civilization which places severe visual tasks upon the eyes. Until a few generations ago the eyes were used principally for distant vision out of doors under hundreds or even thousands of foot candles of illumination. In contrast, human beings now perform close visual operations carried on principally indoors under intensities only a small fractional part of those under which the eyes developed.

The eyes continue to operate as best they can under all lighting conditions. This causes nervous disorders that handicap the individual and may eventually cause suffering and disability. These disorders have frequently been eliminated by pro-

the eyes in the best condition. The other partner, lighting, which can be controlled in quantity, diffusion, color and distribution, offers the greatest opportunity to promote better seeing. Good school lighting costs less than nothing if it eliminates the retardation of only a few of the pupils with defective eyes. In addition to helping pupils with defective eyes, good lighting also safeguards the eyes of other pupils. Only a small amount of current expense goes for artificial lighting. In a typical large city the actual lighting cost per pupil amounted to 63 cents or less than 1 per cent of the total cost per pupil.

With reference to natural lighting in school classrooms, the greatest amount of daylight practicable should be provided. Regardless of window area and room size, the level of natural light found in the interior diminishes rapidly as the distance from the window increases. A high level of illumination near the window is therefore required in order to have anywhere near an adequate supply near the back wall. Investigations with a sensitive light meter reveal that only on the brightest days is there adequate daylight to provide a satisfactory level of illumination throughout the room.

The 1931 edition of the Statistical Abstract of the United States shows that during the ten months of the school year the percentage of possible sunshine throughout the forty-eight states amounts to only 58 per cent. This clearly indicates that even when natural lighting is used to its practical limit throughout the school day, artificial illumination is necessary more than 40 per cent of the time to provide adequate seeing conditions. On dark winter days the amount of daylight inside the room near the side wall opposite the windows is often less than 1 foot candle. It is therefore evident that although natural daylight is used and should be used to its practical limit, it is also necessary to provide a system of artificial lighting designed to fulfill the requirements for good illumination at all times.

Controlled Lighting Pays in Dollars and Cents

A two-year test in classroom lighting conducted by the city schools of Tuscumbia, Ala., in cooperation with commercial engineers, indicates the importance of adequate lighting. Faced with the statements of educators that from 8 to 15 per cent of school children acquire defective vision during their school years, F. C. Albert, lighting engineer of the local power company, sought the aid of R. E. Thompson, superintendent of schools, Tuscumbia, in an experiment which he hoped would prove his theory that poor lighting in the average school is the thief that robs so many of the nation's children of good vision.

RESULTS OBTAINED BY RAISING LEVELS OF ILLUMINATION FROM 3 TO 12 FOOT CANDLES

Groups Tested	Increase in Seeing Efficiency When Illumination Was Quadrupled
Those with better eyes	14 per cent
Those with poor eyes	22 per cent
The fast workers	28 per cent
The slower workers	40 per cent

viding illumination of the proper quantity and quality.

The motion of the eye under poor illumination corresponds to the working of a camera under the same conditions. A snapshot will not take the picture; a time exposure is necessary. Add an extra fraction of a second for each time exposure taken with the eyes and in the course of a day at least a half-hour is lost. Ample diffused illumination makes snapshot action possible, increases the worker's efficiency and reduces ocular fatigue. More and better lighting makes visual work easier and thereby converts into useful work a greater part of the available human energy. The foregoing discussion applies not only to people with normal vision but also to those with subnormal vision. As a matter of fact, subnormal eyes receive greater benefits from good lighting than do normal eyes.

The results given in the accompanying table, obtained by raising the levels of illumination from 3 to 12 foot candles, are typical of the benefits of better lighting. These test results demonstrate that lighting acts as an agent toward balancing inequalities in the performance of the human machine. In other words, good lighting helps those who need help most.

The complex visual operation called seeing is a partnership of two essential factors, vision and lighting. Without light the most perfect eyes are useless. The principal control over vision is the application of lenses to sharpen and otherwise put



With an average area per outlet of approximately 65 square feet the 300-watt totally indirect lighting units provide an illumination in service of 18 foot candles for this drawing room.

Two identical rooms were chosen in a school building of modern design and furnishings. Each room had been equipped with two 100-watt direct lighting fixtures controlled by a wall switch. In one room the lighting equipment was left unchanged; in the other it was replaced with four 300-watt totally indirect fixtures controlled by a photo-electric relay which automatically turned them on when natural light faded to a point where vision became difficult. The latter installation was designed to maintain 12 foot candles of light which was well distributed and free from glare.

An equal number of pupils of similar rating—determined by the Stanford Achievement Test and Otis Intelligence Test—were assigned to each room and great pains were taken to balance the two groups as evenly as possible in talents, intelligence and achievements.

At the end of the first year only four pupils out of thirty-six failed in the light controlled room as against eleven failures out of thirty-four pupils in the other room, a decrease of 20 per cent. The pupils' reactions were so astonishing as to grades, attentiveness and alertness that the experiment was continued a second year to check the results. The second year's results, with forty-two pupils in each room, confirmed those of the first, with eight less failures in the light controlled room than in the other room.

While no definite value can be placed on the intangible benefits to pupils and teachers in the way of increased knowledge and improved and preserved vision, the test indicated that controlled classroom lighting will pay for itself in dollars and cents. At the end of the first school year, 1930-31, it was found that in order to maintain 12 foot candles of illumination the artificial lighting system had operated 34.1 per cent of the school hours. At the end of the second year the system had operated 32.6 per cent of the school hours. The total electrical energy used in each room was metered and the average cost of the additional consumption for the well lighted room was \$22.35 for the term.

The foot candle is the unit for measuring illumination. It is the average intensity found on an area of one square foot under one lumen of light, the lumen being the unit of quantity of light. The level of illumination obtained from any lighting system, either artificial or natural, can be readily measured by means of a foot candle meter. The accuracy of this meter is sufficient for making check tests on any lighting system. More accurate instruments are available for use in the laboratory or elsewhere if careful foot candle readings must be made.

Economy limits the level of illumination employed in artificial lighting to 10 to 20 foot candles instead of 1,000 to 10,000 foot candles, the levels

under which the eye evolved. With these comparatively low levels as well as with the higher ones, illumination must be safeguarded as regards quality. It must be free from glare and well diffused throughout the room so that there will be no extreme brightness contrasts between the surface to be viewed and its surroundings.

Glare is any brightness within the field of vision that causes annoyance, discomfort, interference with vision or eye fatigue. Glare may come directly from the light source or it may be reflected from a glossy desk top or a polished glass or metallic surface. The extent to which either direct or reflected glare is objectionable is partially dependent upon the contrast in brightness between the light source and the background. A bright light source in the center of dark surroundings is particularly annoying, while the same light source would hardly be noticed if placed out of doors during the daytime. The most effective way of reducing contrast between the brightness of lighting units suspended from the ceiling and their surroundings is to provide ceiling finishes that are in general light in tone rather than dark and to install lighting units of a low brightness designed to diffuse the light properly.

The degree to which glare is uncomfortable also depends upon the position of the light source in the field of view. Even small light sources, if

reflected glare from glossy paper or polished metal surfaces is annoying to the eyes.

In general, reflected glare is often more objectionable than direct glare. Objects appear harsh and unpleasant. Glossy finishes, glazed paper, shiny desk tops and glass surfaces reflect bright images of windows and artificial light sources, producing reflected glare and visual discomfort. Surfaces of walls, ceilings, blackboards and furniture should have a dull or mat finish to diffuse the light falling on them, thereby eliminating reflected glare. It is annoying to the draftsman or the mechanic in the school manual training room to have dark shadows always present under pencils, drawing instruments and tools. Exposed lamp filaments cause these harsh shadows whereas light from a diffusing luminaire of large area tends to shine around an object and consequently to soften the shadows.

There are three general systems of artificial illumination classified according to the manner in which light is distributed—direct lighting, indirect lighting and semi-indirect lighting.

Direct lighting systems employ luminaires which send the greater portion of light directly to the surfaces to be illuminated. Quoting from the Standards of School Lighting, "There are available many types of direct lighting units, or luminaires, suitable for school use, but those most generally



White glass enclosing globes in this classroom provide fairly satisfactory illumination. Mazda lamps of 300 watts, enclosed in 18-inch globes, spaced on 10 by 12-foot centers, provide on an average 11 foot candles in service.

placed directly in the line of vision, are annoying unless they are properly equipped with shielding devices or diffusing media. Local lighting units on desks in the drafting room or on machines in the shop are objectionable because often they do not entirely eliminate direct glare from the light source. Even if they do eliminate glare, the re-

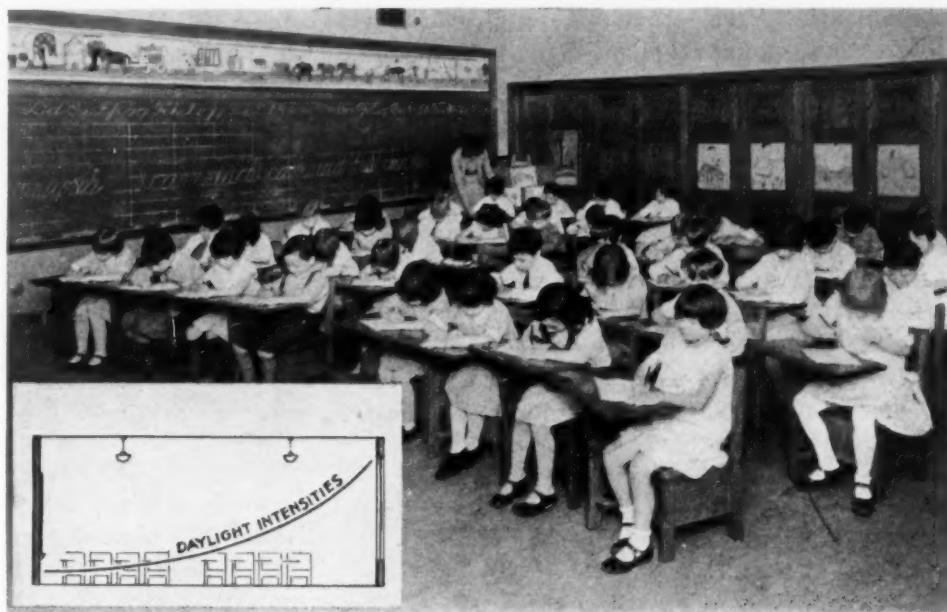
employed are of translucent glass shaped to reflect the light downward from the top and diffuse it through the bottom and sides. Some light should be transmitted through the top to illuminate the ceiling and prevent objectionable contrast. The characteristics of a good direct unit for school use are a light output of not less than 80 per cent; 20

to 35 per cent of the light delivered in the upper hemisphere; a distribution curve to suit the spacing of the units; sufficient density to conceal the light source; low surface brightness; well annealed glass that is not easily broken, and a hanger of good mechanical construction.

"For classrooms or rooms for study or instruc-

at which lighting units are mounted above the work and the distance by which they may be separated to provide reasonably uniform illumination, with the light coming from a sufficient number of directions so that shadows will not prove troublesome. However, the actual location of outlets is controlled to some extent by the structural fea-

The curve indicates the rapid falling off of daylight across the room away from the windows. On bright days the light may be adequate, but on dark days the pupils farthest away from the windows are unfairly handicapped.



tional purposes, with luminaires 10 to 12 feet from the floor, the surface brightness of the units should in no case exceed 3 foot candles per square inch for the brightest square inch. A lower limit of brightness is feasible and is to be preferred."

With most commercial direct lighting units used in classrooms, the following glass sizes will meet this requirement: 75-watt lamp, 10-inch globe; 100-watt lamp, 12-inch globe; 150-watt lamp, 14-inch globe; 200-watt lamp, 16-inch globe, and 300-watt lamp, 18-inch globe.

Indirect and semi-indirect lighting systems utilize the ceiling and upper side walls for redirecting and diffusing light throughout the room. Again quoting from the Standards of School Lighting, "The indirect and semi-indirect systems, though somewhat less efficient from the standpoint of the amount of light delivered to the work, are high in 'seeing efficiency,' for they have the advantage of producing softer or more diffused illumination with marked freedom from glare.... The trend in semi-indirect and totally indirect units is toward an enclosing clear glass top, which greatly simplifies the maintenance of efficiency." Indirect and semi-indirect types of units best fulfill the requirements for lighting mechanical drawing rooms, sewing rooms, art rooms and sight saving rooms where visual tasks are particularly difficult.

Fairly definite relations exist between the height

tures of the interior. Cross beams and supporting columns as well as ceiling height must be considered.

For the most common ceiling heights, namely, 10 feet to 14 feet, the maximum distance between lighting units should not exceed the height of the ceiling. A closer spacing is beneficial and often desirable; on the other hand, a wider spacing is not recommended because illumination midway between units falls off rapidly.

The usual layout of desks in a classroom or study room leaves aisles along side walls, in which case it is satisfactory to place the first row of outlets out from the wall at a distance not exceeding one-half the spacing distance between rows. In manual training shops and laboratories work benches are placed close to the side walls and in order to light these work areas properly it is necessary that the first row of outlets be placed out from the side wall at a distance not greater than one-third of the spacing distance between rows. To provide high intensity lighting on vertical surfaces, such as blackboards, it is necessary to install special outlets, the location of which depends upon the type of equipment employed. A highly recommended system consists of outlets inserted in the ceiling $1\frac{1}{2}$ feet to 2 feet out from the side wall and equipped with lamps above prismatic glass plates which refract the light toward the blackboard.

Eight to 12 foot candles of artificial lighting should be provided in the classroom or study room and this illumination should come from lighting units of either the indirect type or of the enclosing globe type. In a classroom of the usual size, 24 feet wide, 30 feet long, with a 12-foot ceiling height, six outlets spaced on 10 by 12-foot centers will be required. With this spacing distance 300-watt lamps in white glass enclosing globes will provide an average illumination in service of approximately 11 foot candles.

Illumination Requirements for Special Rooms

In general, for schoolrooms where it is found from the spacing-ceiling height rule that six outlets or more must be installed in order to provide a fairly even distribution of illumination, recommended lamp sizes are as follows: where the average area per outlet is 80 square feet or less, 200-watt; where the average area per outlet is 81 to 120 square feet, 300-watt; where the average area per outlet is 121 to 190 square feet, 500-watt.

Illumination requirements for drafting rooms, sewing rooms and sight saving rooms are some-



The human eye is not capable of judging light values. The foot candle meter, however, does the job accurately.

what more critical than those for general classrooms and study rooms. Higher levels of illumination are desired and it is of greater importance to recognize the highly diffused illumination obtained from the less efficient indirect and semi-indirect types of units. These combined requirements necessitate larger lamp wattages than those specified for classrooms.

In general, in drafting rooms where six outlets or more are required from the spacing-ceiling height rule, recommended lamp sizes are as follows: where the average area per outlet is 70 square feet or less, 300-watt; where the average area per outlet is 71 to 100 square feet, 500-watt;

where the average area per outlet is 101 to 150 square feet, 750-watt.

In planning the lighting system for school buildings, some thought should be given to its proper maintenance while in service. The fact is often overlooked that lamps and reflectors become covered with dust and dirt which materially reduces the light output. As a result good illumination systems depreciate rapidly and complaints are received on the low levels of lighting. Every lighting system should have a well planned maintenance schedule whereby the units are cleaned periodically at such intervals that no appreciable amount of dust and dirt is allowed to collect. It is also important that ceilings and upper side walls be fairly light in tone if these surfaces are depended upon to any extent for reflecting the light. In this case they must be cleaned or repainted at least once every two or three years.

In planning a new school building the wiring system should be designed not only to distribute properly the immediate load of electrical energy throughout the interior but also to meet, to a reasonable degree, the probable future needs of the building. Lighting maintenance problems may be fairly simple or extremely difficult and uneconomical, depending upon the care taken in selecting the size of wire, conduit, panel boards and switches, as well as the location of outlets and lighting units for the initial installation.

Modern School Buildings Counted Too Dainty

That "the architectural daintiness" which can be observed in some of the more recent school buildings, particularly the junior high schools, be avoided, is the recommendation of Prof. Ernst Hermann, director, Boston University's Sargent School of Physical Education, in an article in a recent issue of *Education*. The article is entitled "The Place of Play and Recreation in the Community."

Professor Hermann points out that children are in a more or less primitive state of development and "these dainty buildings with their delicate coloring, expensive paneling, inflict a severe nervous handicap upon youngsters."

"Children," he declares, "need in every building some beauty to develop reverence for art, but the school building must be an attractive, useful home for the child in which he can express himself. He should not be under constant strain. Utility should determine the layout of the playground, the proper surface, the proper equipment and the type of building. The whole should have such a landscape that it would stimulate the child's love for nature, and develop within him a respect for beauty and orderliness."

Professor Hermann also advocates more diversified physical education during the elementary school years, as this period is the natural and most effective period for the development of fundamental skills, sound mental habits and social integration, all of which are fostered by play and recreation.

How to Select and Apply Wall Paint

By FRED W. FROSTIC, Superintendent of Schools, Wyandotte, Mich.

THE recent application of CWA awards to include school maintenance projects, covering both materials and labor, has offered immediate relief to many school systems that for the past three or four years have been unable to meet the urgent need for repairs, due to lack of funds.

School projects, many of which can be carried on indoors in inclement weather, offer especially favorable opportunities for work for the unemployed. Most school projects require skilled or semiskilled workmen, and hence are an excellent supplement to the usual city or county project which uses a large amount of unskilled labor. The limited funds available for maintenance during the past few years have been applied to urgent needs, such as protecting buildings from exterior depreciation, and as a result interior maintenance, such as painting, has been largely neglected.

Two Factors Must Be Watched Carefully

Painting is therefore one of the most frequent projects proposed by school executives. Because of the high proportion of labor costs involved in this work, great care must be exercised in the selection and purchase of paint. Two points must be observed in carrying out these projects if efficiency in operation and high quality of the finished product are to be obtained. Foremen and supervisors must be chosen carefully, and intelligence must be used in selecting materials in terms of the use that is to be made of them.

The selection of competent foremen can usually be arranged through the administrator in charge of the projects since the general plan is to allow the governing body applying for the project to select the foreman. Supervision is best carried on by the regular maintenance men of the school system.

To choose proper materials is not simple. This task is easiest for school systems that have well defined standards of materials, because they are able to convince buying authorities regarding the need for certain types of material. Wall finishes which we are to discuss here are exceedingly difficult to select.

The subject of paint and its application is still

in a highly controversial state. Salesmen and experienced technologists make utterly irreconcilable statements regarding their products as compared with those of their competitors. Consumers also differ in opinion regarding the serviceability of certain products, because it is difficult to make adequate tests of the products concerned. There are, however, certain principles governing the selection of paint products that are generally accepted as sound.

First, the material should meet adequately the requirements of the surface to be treated from the standpoint of coverage, economy, length of service, esthetic qualities and the possibility of continuing the treatment or a different treatment at a later date without undue difficulty.

Second, standard products manufactured by responsible concerns should be chosen. Such manufacturers are usually willing to study the consumer's problems and if they cannot fill a requirement adequately they are frank in saying so. The formula labels on products of this type of manufacturer can usually be relied upon.

The formula considered most desirable will vary with the kind of surface to be treated, the degree of permanence, the esthetic appearance and the degree of economy required, and also with the type of possible future treatments.

The Most Efficient Wall Primers

Adequate treatment of plaster walls by a good primer is especially important no matter what the later treatment may be. Glue size and glossing oils or rosin should never be used as a first coater if flexibility of later treatments is desired. A high grade wall coater should be used, which will ensure resistance to hot spots, prevent suction in later coats and serve as an adequate base for any future type of treatment. Hot spots in plaster can be treated successfully by a good coat of aluminum paint. Wall primers that contain a high percentage of china wood oil and only a small quantity of linseed oil are usually the most efficient.

Among the cheaper varieties of first coaters are the cement coaters which are mixed with water and provide an inert base as well as adequate pig-

ment coverage. The newest type of casein paints are said to provide a good base and at the same time give inexpensive coverage. The washability of this product, however, is questionable. Many walls have been spoiled for economic maintenance by the application of cheap paint primers. The first surface is of prime importance. Later coats often peel and crack, primarily because the first coat has been inadequate.

Water paints have been used for many years in school room wall decoration. They are easy to apply and inexpensive. Frequent washing is necessary, however, in order to maintain a good surface, and this is especially difficult to carry out on rough walls. The cost of frequent washing must be reckoned in the total cost of maintaining such walls. The material does not provide a good base for other paints so it is difficult to change the type of treatment.

How to Test Washability of Paint

If cheap coverage is desired it may be found desirable to give the walls a first coat of casein paint. After a year or two this can be followed with oil paint, provided the oil coat is preceded by a coat of a good suction primer.

The best wall paints contain lithopone and titanium pigments and china wood oil as the vehicle. The presence of linseed oil in these paints, except in a very small quantity, reduces the life and washability of the product. The use of china wood oil increases the price as well as the serviceability. Cheaper paints can be made with linseed oil, and particularly with its substitutes. A good way to test the washability of these products is to paint narrow strips of a piece of wall of uniform quality using the various kinds of paint that are to be tested. The painted surface should then be washed at frequent intervals, each product being washed in the same manner and at the same time with equal strokes. The effects of aging and of liability to collect dirt as well as the resistance to washing should be noted.

Brushing and spraying lacquers on walls is a relatively new wall treatment. I experimented with several brushing lacquers a number of years ago when brushing lacquers were new on the market. The experiments were conducted on dadoes, particularly around stair landings where dirty hand marks were numerous. Finally one particular type of lacquer was selected out of eight, based upon its washability, freedom from tendency to collect dirt, ease of application, cost and appearance. The dadoes of the second and third floor corridors of a large building were treated in this manner. Maintenance was thereby reduced over 75 per cent. The material was renewed last sum-

mer after seven years of highly satisfactory service. Dirt does not cling to this type of surface and washing is needed less frequently. The surface always appears clean and sanitary.

The success of this brushing lacquer stimulated a desire to develop a flat lacquer for walls in the interest of better appearance and serviceability. The requirements were not easily met. First, the material had to be as flat as a good flat wall paint so as to avoid highlights; second, it must be easy to apply either with a spray or a brush; third, it must not be prohibitive in cost, and fourth, it must be as washable and as lasting as the gloss type of lacquer used in the corridors. Two manufacturers succeeded in producing the desired material. Several buildings have been treated with this lacquer and it is proving highly satisfactory. The cost is practically the same as that of high grade lithopone-titanium-china wood oil flat paint.

Lacquers require careful undercoating in order to prevent the surface from lifting. Cement coat treatments next to new plaster seal the plaster surface and provide depth of color to the later coats of lacquer, and the undercoater is made inert and will not lift away from the plaster. The cement coat itself is porous and requires more careful application of the lacquer in order to obtain good coverage. The best results have been obtained when a good china wood oil undercoater is used, followed by a high grade lithopone-titanium-china wood oil flat paint. The lacquer may be applied immediately or at a later date. Under no circumstances should lacquer be applied over house paint that contains linseed oil, enamel or varnish. However, if these finishes are first coated with a flat wall paint of the type described, lacquer may be applied over such coatings with safety.

Skill Required to Spray Lacquer

To spray lacquer a skilled operator is required. The ordinary paint spray man wastes a great deal of lacquer because he holds the spray too far from the work. This permits the lacquer to dry in the air between the nozzle and the surface, thus wasting a large part of it. This fills the air and the floor surface with dust and some of the partially dried material sticks to the wall and makes the surface coat rough. Sprayed lacquer must be handled with the same technique as that used by a good car spray man.

Lacquer offers an interesting and valuable field of investigation and development where service and low long term maintenance costs are desired. China wood oil flats are still the most commonly used products of the better class. Cheap work and cheap products seldom result in economy in the long run in painting.

MODERN PRODUCTS for the SCHOOL

New Instrument for Measuring Light Values

While great care is taken by the architect to ensure adequate light in the classroom when it is designed, little attention is given this matter after the room is occupied. The architect may make accurate calculations and measurements in order to provide adequate illumination in the room, but his efforts are wasted unless steps are



taken to see that the original lighting ideal is carried out after the room is occupied.

This requires that the illumination of the room be checked at regular intervals by a light sensitive instrument of the type used by engineers. The human eye cannot be depended upon to gauge light values. The lack of a simple instrument for registering the amount of light has hindered such work in the past.

A new instrument, the Sight Meter, made by the Sight Light Corporation, Chrysler Building, New York City, measures light with the same simplicity that a thermometer measures heat. The instrument consists of an adaptation of a batteryless photoelectric cell which is sensitive to the intensity of light, and a graduated scale on which this intensity is indicated. This scale is calibrated in foot candles, and light readings are made by placing the instrument on the working plane or desk top and allowing the indicator to come to rest.

This instrument may be used as a check on the amount of light given by the original lighting installation, and also as a gauge for fixture mainte-

nance, and as a guide for teachers to indicate when daylight illumination is not sufficient. If the meter shows that there has been a decline in intensity it would be well to check the condition of the walls and ceiling. Dusty globes or shades or worn-out bulbs might also be the cause of the decrease in light. It is practically impossible for the human eye to register this gradual decline in the amount of light, but the result of this lowered efficiency is fatigue and eyestrain. Lighting efficiency is also modified by changing the color of the walls, the ceiling, the floor, the curtains and other objects in the room. After redecorating or other changes it is well to test the light intensity to be sure that a greater light absorption is not taking place. A slightly darker wall or ceiling may require an increased light output in order to bring the lighting at the working plane up to standard.

The many factors that modify lighting intensity make it imperative to use regularly some form of accurate light measurement instead of depending on human judgment. Engineering precision was used to provide proper illumination in the beginning, and a comparable accuracy should be used in continuing it.

A Quick Acting Broiler for School Cafeterias

The Broilator Stove, made by the Norge Corporation, Detroit, is extremely quick acting and shortens cooking time on steaks, chops and other meats, due to the fact that it fires simultaneously from top and bottom. This method of cooking sears in the natural juices and flavor, thereby overcoming the difficulties of keeping foods tasty and hot at all times on the steam table.

The Broilator is a gas-fired, flueless, odorless and greaseless broiler which may be placed at the end of the cafeteria serving counter. Orders may be taken at the beginning of the line and delivered at the opposite end. In this way there need be no waiting and the order is delivered crisp and hot to the diner.

The dimensions of the stove are: height, 31 $\frac{1}{4}$ inches, width, 24 $\frac{1}{4}$ inches and depth, 14 inches. The unit weighs 170 pounds. It is made in a standard and de luxe commercial model. The

standard finish is in black porcelain. Chromium plated controls, and stainless steel corners and top plate can be had in the de luxe model.

Portable Vacuum Ensures Low Cleaning Costs

A practical solution to the problem of keeping school floors and corridors clean at low cost is revealed in the new Spencer heavy duty portable vacuum cleaner. This unit is being offered by the Spencer Turbine Co., Hartford, Conn., manufacturers of the Spencer central cleaning system, and makes possible the application of Spencer principles of cleaning to buildings where a central system is not available.

The unit is precisely what its name implies—a portable cleaner weighing but 120 pounds and easily wheeled up-



stairs or down over rough floors or smooth. The reason for this is that it is well balanced, with large wheels. Construction is such that no dirt escapes. The separator is of the tubular bag type consisting of five filters. Dirt is caught in the bottom of the unit in a pan which is easily removed for cleaning. Another feature is the quietness of its operation, which recommends it particularly to school use. The dimensions are 35 $\frac{1}{2}$ inches high, 33 inches long, with 20-inch wheels. A standard inlet valve is provided. The machine can be used also for blowing.

A New Method of Whipping Cream

An electric whipper for cream that uses an entirely new mechanical principle of operation is made by the Hobart Manufacturing Co., Troy, Ohio. The machine, the Air Whip, as its name implies, whips cream by sending many streams of small air bubbles through the liquid cream. By this method of whipping a quart of cream may be whipped in a few seconds without any danger of it turning to butter, or becoming a heavy, buttery cream, according to the makers.

Refrigeration is not necessary dur-



ing the whipping process and the whipped cream stands up longer. One quart of liquid cream produces three or more quarts of whipped cream. As little as one-half pint of cream may be whipped by this method.

The machine is made in two sections, the container and the base. The base contains a motor driven compressor that forces air through the disks of the container. The machine may be connected to any ordinary electric outlet and operated by a snap switch in the base. The container, which is removable, is fitted on the base and the aerating disks that form the bottom have a central stem fitting into a rubber gasket in the base to form an airtight joint.

The disks are scored with minute grooves along which the air travels and escapes into the cream. They may be removed from the container and by turning a button they are separated on the stem so that thorough cleaning is easily accomplished.

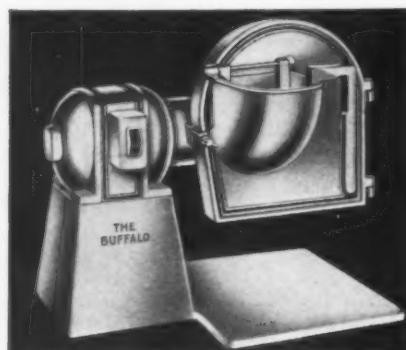
The container, base and aerating disks are made of solid nickel silver, and the container and base are chromium plated. The Air Whip is made in

several sizes, ranging from one or two quarts up to four gallons, and may be obtained as an attachment for the larger type of Hobart mixers.

New Vegetable Slicer Serves Many Purposes

Much time and labor in preparing all sorts of vegetable dishes can be saved in the school kitchen through the use of a new vegetable slicer produced by John E. Smith's Sons Co., 50 Broadway, Buffalo, N. Y., known as Model C. The machine slices and shreds various vegetables, fruits and nuts, grates cheese, cuts julienne and French fried potatoes, and is also adapted to slicing thin, uniform potato chips.

A small but efficient meat grinder can likewise be attached to the machine. In fact, eight different attachments are provided, including a grater disk, a shredder disk with a 5/64-inch hole, a French fried disk, a slicer disk adjustable to $\frac{1}{8}$ -inch thickness, a julienne disk with a 3/16-inch square



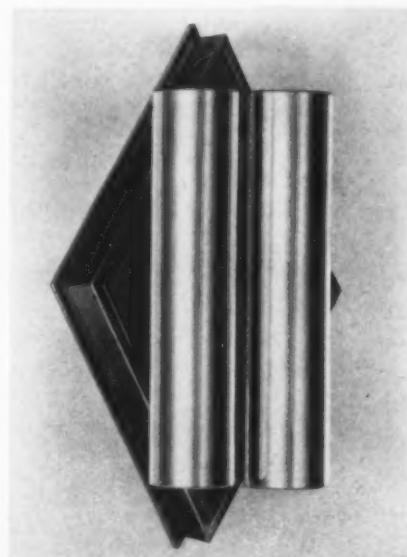
hole, two slicer fronts and a meat grinder. The machine, which is equipped with a 1/3-h.p. motor, weighs 105 pounds. It is 16 1/2 inches long, 19 1/4 inches wide and 21 inches high. It can be furnished with an extended shaft to which a grinding or buffing wheel may be attached.

Signal Chimes for Class Periods and Telephones

A newly developed chime that may be used in place of the sharp staccato telephone bell is a product of the National Signal Systems Co., 608 St. Clair Avenue, N. W., Cleveland. The single soft musical note that is repeated at the beginning of each ringing period should not disturb class concentration as much as a loud insistent bell. Single and double chimes are made for use on telephones of all types except harmonious party lines and

lines using long and short ring codes.

The Mell-O-Tone Chimes do not operate directly from the ringing circuit, but from a local low voltage circuit, either transformer or dry cells. The relay box, with condenser and alternating current relay, may be incorporated in the unit or separated, in which case the chime is mounted on a low, diamond shaped bakelite base, and the



compact relay box placed in a convenient location.

Mell-O-Tone signals of a larger size and greater volume for indicating class periods are also available.

New Trade Pamphlets

E. I. Du Pont de Nemours & Co., Inc.—Development of Dulux Mill White, a finish possessing among other advantages those of being pure white, staying white, drying dust free in three to five hours and providing a sheen which lasts, is described in a booklet just issued by the E. I. Du Pont de Nemours & Co., Inc., Wilmington, Del.

Lily Tulip Cup Corp.—A food service bulletin designated as No. LT 23 is being distributed by the Lily Tulip Cup Corp., 122 East Forty-Second Street, New York City. This is of particular interest to those in charge of food service in school systems. Various types of cups and containers are described such as Lily cups for milk and other beverages. There is the hot drink cup, sturdily constructed and made with a rolled brim and decorated border. On the more practical side, there are Paktite containers shown in a wide range of sizes and convenient for holding leftover foods.



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THE NEWS OF THE MONTH

Cleveland Meeting of Superintendents Will Be "Working Conference"; Program Is Practical

By PAUL C. STETSON, Indianapolis,
President, Department of Superintendence

The annual convention of the Department of Superintendence of the National Education Association will be held in Cleveland, February 25 to March 1, inclusive.

Shortly after the Minneapolis meeting the executive committee of the Department of Superintendence met in Indianapolis. At that meeting the committee adopted a plan for making the convention a working conference. This plan was to select seven outstanding educational problems of national import. A chairman, a secretary and twenty-five or thirty members of the department were asked to take charge of the analysis, the collection of material and the presentation of these problems for the Cleveland meeting.

Nearly 4,000 Will Participate

Each chairman was further asked in his analysis to formulate at least ten subtopic committees and to assign from his general committee of twenty-five or thirty members a chairman and a secretary for each subtopic committee. When that work was completed Sherwood D. Shankland, executive secretary of the department, undertook the tremendous task of assigning all members of the Department of Superintendence to membership on these subtopic groups.

Nearly 4,000 members of the Department of Superintendence have been assigned a definite task on some general or subtopic committee. By December 1 these general and subtopic committees were busily at work collecting material, analyzing their problems, submitting suggestions for their solution, and giving to their chairmen the benefit of their wide experiences in a multitude of fields.

The purposes of this reorganization are to tap the great resources of the department for constructive suggestions on the many important problems confronting school executives today. There is a wealth of unused constructive ability in 4,000 school executives. It is hoped to stimulate not only thinking, but also action on educational

problems that are waiting to be solved.

The second purpose is to encourage discussion at the Cleveland meeting by keeping the groups small enough so that this will be possible. In recent years the discussion groups have grown beyond all possibility of making them forums for informal discussion. An open, frank discussion of educational problems at Cleveland is one of the chief objectives of the convention.

The third purpose is to stimulate interest in the Department of Superintendence by giving each member a definite task. Not only will each member have a definite task from now until the convention opens, but when he arrives at Cleveland he will find a specific assignment awaiting him.

The fourth purpose in this reorganization is, by making the meeting a working conference, to give the executive definite and constructive suggestions for the solution of the many problems they meet at home. Inspirational addresses are splendid and have a real place at such a meeting, but definite findings are of even greater importance.

The General Topic Groups

The seven topics and the chairmen of each general topic group are as follows:

"The Administration of Teacher Training," Edward D. Roberts, superintendent of schools, Cincinnati, chairman.

"A Comprehensive Program of Public Education," J. Stevens Kadesch, superintendent of schools, Medford, Mass., chairman.

"Financing Public Education," Frank Ballou, superintendent of schools, Washington, D. C., chairman.

"Education for the New America," Willard E. Givens, superintendent of schools, Oakland, Calif., chairman.

"Public Education and Public Welfare," Leslie Butler, superintendent of schools, Grand Rapids, Mich., chairman.

"A National Outlook on Education," John K. Norton, Teachers College,

Columbia University, chairman.

"Interpreting the Schools to the Public," Frank A. Jensen, superintendent of schools, Rockford, Ill., chairman.

Not only will the meeting at Cleveland be a working conference, but it will be a convention as well. The meeting will open Sunday afternoon with vesper services in the music hall of the Municipal Auditorium. This meeting will be addressed by Dr. William Lowe Bryan, president, University of Indiana.

The general sessions will be held Monday morning and evening, February 26; Tuesday morning and evening, February 27; Wednesday morning and evening, February 28, and Thursday morning and afternoon, March 1.

Meeting Place for Each Group

Monday afternoon and Tuesday afternoon will be devoted entirely to the meetings of the general and subtopic committees. Over seventy such committees have been appointed and provision has been made for each one to have a meeting place in Cleveland. I am sure each member of the Department of Superintendence will be anxious to attend the meeting of the particular committee to which he has been assigned and lend his aid in the forming of plans.

There is no general theme or keynote for this meeting, but an effort has been made to integrate the work of the general committees and the addresses to be given at the general sessions. Thus on Monday morning, February 26, "Education for the New America" will be discussed from the point of view of colleges of education, by Dean William Russell of Teachers College; from the standpoint of the public schools, by Dr. Harold G. Campbell, deputy superintendent of schools, New York City; from the standpoint of other agencies, by Dr. John H. Finley, associate editor, *New York Times*.

An innovation is planned for Monday evening in the form of a banquet for all members of the department, their friends and members of allied departments. The banquet will be held in the arena of the Municipal Auditorium, and an attendance of between 3,000 and 4,000 is anticipated. In addition to appropriate music and entertainment, an address will be de-

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NAME

ADDRESS

THE NEWS OF THE MONTH

livered by Dr. Charles E. Merriam, University of Chicago, on "Economy, Wise and Otherwise, in Municipal Government." There will be a second address, subject and speaker to be announced later.

Tuesday morning the general subject will be "Some National Problems in Education." The business meeting of the department will be held at this time. Merle Sidener, president, Sidener, Van Riper & Keeling, advertising agency, Indianapolis, will discuss "Interpreting the Schools to the Public," and Prof. Arthur B. Moehlman, school of education, University of Michigan, will discuss "Planned Teacher Production."

Two important addresses will be delivered on Tuesday evening, one by Dr. Robert R. Moton, president, Tuskegee Normal and Industrial Institute, and the other by Dr. Payson Smith, state commissioner of education for Massachusetts.

The general subject for Wednesday morning will be "Public Education and Public Welfare." Various aspects of this topic will be considered. Dr. George F. Zook, U. S. commissioner of education, has as his topic "Public Education and National Welfare." Edward A. Filene, a prominent Boston merchant, will discuss "Public Education and the Nation's Business." Dr. E. C. Hartwell, superintendent of schools, Buffalo, N. Y., and a former president of the Department of Superintendence, will speak on "Our National Dividends From Public Education."

Committees Will Report Thursday

The topic for Wednesday afternoon will be "A Comprehensive Program of Public Education." Howell Cheney, a manufacturer of South Manchester, Conn., will discuss "The Relationship Between Secondary Education and Present Economic Trends." Frank Pickell, superintendent of schools, Montclair, N. J., Thomas Gosling, superintendent of schools, Akron, Ohio, and Dr. James Edmonson, dean of the school of education, University of Michigan, will discuss this topic from the viewpoint of the elementary schools, the secondary schools and higher education, respectively. This session should arouse keen interest.

The program for Wednesday evening has not as yet been completed. On Thursday, both morning and afternoon, the chairmen of the various

groups and their various subject committees will make their reports. Thursday's program will be one of the most important of the entire week because on this day all persons will have an opportunity to learn, in tabloid form to be sure, the actual findings of the seven general committees. The members of the department will be interested in learning that the reports of the seventy subtopic committees as well as the findings of the seven general committees will be published in full in the Proceedings as soon as possible following the convention.

The active cooperation of all members of the Department of Superintendence is needed to make the meeting a success. This can be given by work on the committees prior to the convention; by regular attendance at the sessions and by participation in the committee discussions; by attend-

ance at the banquet on Monday evening, and by membership in the Department of Superintendence. While membership in the Department of Superintendence is not a prerequisite to assignment and work on a committee, it is presumed that those who work on a committee, prior to or at the Cleveland convention, will join the department.

It has been suggested that the Cleveland meeting, with its emphasis on important problems both during the general sessions and the committee meetings, should formulate what will become a code of action for school executives and that "such code might become a second Magna Charta of liberty." We have no such ambition as that, but we do hope that the findings of these various groups and the inspiration from the general sessions will enable us to formulate a Magna Charta for education.

Current Educational Trends Revealed at American Vocational Association Meeting

The annual convention of the American Vocational Association, held in Detroit during the first week in December, brought together national leaders in the fields of agriculture, education, commercial education, home economics, industrial arts, industrial education, rehabilitation and vocational guidance. The registration reached the fifteen-hundred mark and included representatives from each of the forty-eight states, as well as Canada and Puerto Rico.

Prominent speakers represented a wide range of interest. Among these were George F. Zook, U. S. commissioner of education; Mrs. B. F. Langworthy, first vice president of the National Congress of Parents and Teachers, and K. T. Kellar, president of Dodge Brothers Corporation.

Mr. Cushman, of the federal board, discussed the possibilities of federal aid for vocational education carried on in high school. This discussion is one evidence of the feeling that was expressed in some of the meetings that the establishment of separate vocational schools cannot be justified. It was believed by some of the speakers that the time has come when those re-

sponsible for the secondary schools should realize their responsibility to provide opportunities in senior high schools for young people to prepare for an occupation.

There seemed to be a feeling also that when this training is provided it should take the form of training for groups of occupations rather than for specialized jobs.

The discussion in some of the sections indicated a tendency, on the part of those concerned with part-time education, to provide preemployment training in the part-time school. This training would be accompanied by trial periods in industry during which the young worker would be under observation. If it was found during this observation that the pupil was unhappy or unfitted for his job, he would be returned to the school for additional training leading to another job.

In the vocational guidance meetings it was found that the present economic crisis has made it necessary for educators to concern themselves with the task of guiding and training graduates of high schools and colleges for the purpose of helping them find the place for which they seem best fitted.

two

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THE NEWS OF THE MONTH

Georgia Universities Benefit by PWA Grant

Among allotments made recently by the public works administration was \$7,570,000 to the regents of the university system of Georgia for the construction of several new buildings and the repair of existing buildings at various colleges and universities in the state. This allotment is on the basis of 30 per cent of the cost of labor and materials being a direct federal grant, with the remainder advanced as a loan with interest at 4 per cent.

Finds School Lighting Harmful to Health

More than 90 per cent of all school buildings are improperly lighted and distinctly harmful to the health of pupils, according to Dr. Hugh Grant Rowell, professor of health education, Teachers College, Columbia University, in a talk before the Civic League and Parent-Teachers Association at Tarrytown, N. Y. Doctor Rowell advocated a grant of federal funds to make the necessary corrections.

"It appears to be a comparatively easy matter for a community to get aid in building a new and beautiful postoffice, perhaps a very creditable monument to a local politician," he said. "Why not, however, let such money be spent in schools in monuments that will give every child the privilege to which he is entitled—a decent education under circumstances which do not rack his eyes, his body or his morale?"

Kansas Teachers Create Planning Committee

The board of directors of the Kansas State Teachers Association has adopted a resolution creating a special committee on a continuing program in education for Kansas.

"It shall be the duty of this committee to develop an educational philosophy for the State of Kansas and to provide the bases and outlines of material on education in the state for the use of county and city teachers' associations and other study groups," the resolution states. "Such material shall also be placed at the disposal of the executive committee of the state association from year to year as a recommendation for a continuing thought

for the program of the annual state meeting."

The committee will consist of six persons selected from the membership of the association.

College Opens School for Talented Children

New Jersey College for Women, through Prof. Herbert R. Kniffin, head of the art department, has established a center where gifted children from the vicinity may meet for mutual inspiration and guidance, *School and Society* reports.

The Saturday School for Talented Children is attended by girls and boys seven to seventeen years of age, who are given the use of the college art studios and facilities each Saturday morning. Pupils are recommended by art supervisors from public, private and parochial schools and are selected by competitive examinations which are given by the college.

Over 3,000 Research Studies Made in 1931-32

Research workers in education, representing 124 colleges and universities throughout the United States, completed more than 3,000 studies in one year, it is revealed in the sixth annual survey of educational research conducted by the U. S. Office of Education.

"Bibliography of Research Studies in Education, 1931-32" prepared by the office of education, library division, lists 3,121 titles of masters' and doctors' theses reporting investigations in twenty-four different fields of education. The bibliography is published as Bulletin 1933, No. 6.

The majority of studies are master of arts theses, totaling more than 2,000. Reported doctors' dissertations number 357. Others are classified as "faculty research" studies.

The field of special problems of the curriculum, dealing with reading, writing, science and other school subjects is the most popular one for research. Vocational training, including such related problems as agricultural education and home economics, is next in order. School health and physical education attracted the attention of research workers as never before, with 166 theses written in these fields during 1931-32.

Committee Will Evaluate Teacher Training Courses

The National Society of College Teachers of Education has authorized the appointment of a committee to examine and evaluate courses for the training of teachers. Both the offerings of college departments of education and the curricula designed for professional training will come under the preview of this committee. The need for constructive, or perhaps better, reconstructive activity in this field is urgent, it is pointed out.

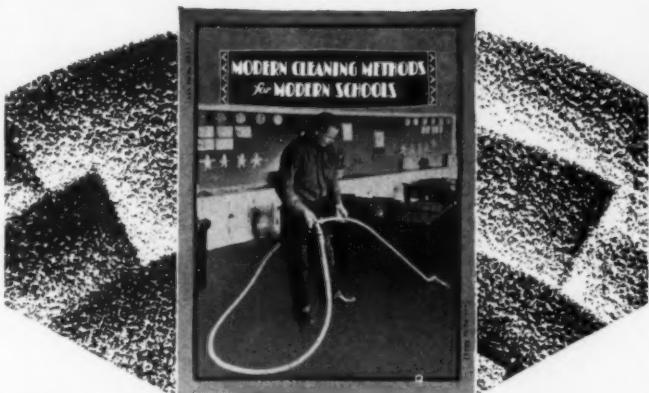
It is expected that the committee's deliberations will result in a revised statement of policy that can be used by the colleges and state departments of education as a guide to practice. The committee will probably make its appraisal of curricula and professional subjects on the basis of data already available in the National Survey of Teachers' Training and in other recent research studies.

Dr. Stuart G. Noble, professor of education, Tulane University, and president of the National Society of College Teachers of Education, recently announced the personnel of the committee, in which is represented every type of teacher training institution and every part of the country.

The committee will hold its first meeting at the convention of the national society, which will be held jointly with the meeting of the Department of Superintendence of the N. E. A., at Cleveland, February 25 to March 1, inclusive.

School Budget Procedure Outlined in Booklet

An interesting study entitled "A Uniform Financial Procedure," has been prepared by the division of research and service, Marshall Gregory, director, for use in Oklahoma. This publication presents a concrete method for legal budgeting for general fund expenditures in Oklahoma school districts of less than 10,000 population. It has been cordially approved by John Vaughan, state superintendent of schools, and will go into effect during the current year. In addition to a budget procedure, the booklet contains a chapter upon the classification of school expenditures, so that these charges may be made uniformly throughout the state.



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Dr. Gates devoted ten years to the necessary scientific studies and through them discovered

the facts about the child and his need of reading, about the inherent difficulties of the subject, about the valuable features of the many "methods," and about the best materials for instruction and their arrangement. He also discovered the best utilization that could be made of these facts and materials. It is found in the Gates System of Reading.

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IN THE EDUCATIONAL FIELD

DR. JOHN HARWOOD of Chicago is the new president of John Fletcher College, Oskaloosa, Iowa, succeeding **DR. JOSEPH OWEN**, who has resigned.

C. S. MAREE is the new superintendent of schools, Swansea, S. C.

DR. CHARLES C. FORDYCE of the department of educational psychology and measurements, Teachers College, University of Nebraska, was recently elected president of the Nebraska branch of the National Vocational Guidance Association.

HALLIDAY R. JACKSON of Ventnor, N. J., has been elected superintendent of schools, Salem, N. J., succeeding **LEIGH M. LOTT**, who resigned recently to become head of the school system at Bridgeton, N. J.

DR. FREDERICK A. SUMNER, president emeritus of Talladega College, Talladega, Ala., died in Hoboken, N. J., on December 24. DOCTOR SUMNER'S service to Talladega began in 1916 and ended with his retirement last June.

H. C. HUNT has been elected superintendent of schools, Kalamazoo, Mich. **CHARLES C. WILSON**, who has been serving as acting superintendent, resumed his former position as acting superintendent when **MR. HUNT** assumed his duties on January 1.

NELL CRAIG, principal of Belvedere School, Omaha, Neb., has been elected president of the Nebraska Department of Elementary School Principals.

DR. WALTER C. EELLS of Stanford University is doing research work this year while on sabbatical leave, under the auspices of the Carnegie Foundation. He is working on an analysis of all published surveys of higher education at the U. S. Office of Education.

Commission Acts to Get Relief Funds for Schools

The Joint Commission on the Emergency in Education is taking immediate steps to secure action by administrative officers and by Congress for further emergency relief to public schools and colleges. In taking this action the recommendations made by the recent National Conference on the Financing of Education are being followed.

RALPH E. BALLIETTE, for four years superintendent of schools, Antigo, Wis., has resigned to accept a similar position at Platteville, Wis.

PROF. O. J. CAMPBELL of the English department, University of Michigan, was elected president of the 1934 National Council of Teachers of English at the organization's annual convention, held recently in Detroit.

W. I. TRAVIS, principal of Banning High School, Wilmington, Calif., for more than twenty-two years, died recently of heart disease. **MR. TRAVIS** had been ill for several months.

DR. O. E. HATCHER, president of Northwestern State Teachers College, Alva, Okla., has been awarded the degree of doctor of laws by Harding College, Morrilton, Ark., in recognition of his accomplishments in educational work in Oklahoma.

DR. THOMAS WILSON ATKINSON, president emeritus, Louisiana State University, died at his home in Baton Rouge, La., on December 25. DR. ATKINSON was named president in 1929, serving until 1930 when he retired and was succeeded by DR. JAMES MONROE SMITH.

J. L. McBRIDEN has been appointed supervisor in the division of secondary education, Nebraska State Department of Public Instruction.

JOHN W. LUMBARD, for more than twenty-one years superintendent of schools, White Plains, N. Y., has tendered his resignation, effective February 1. **MR. LUMBARD** on February 1 will have completed thirty-one years of continuous service in the public schools of the city. DR. H. CLAUDE HARDY, associate superintendent, has been selected to succeed **MR. LUMBARD**, and the post of associate will be abolished.

Federal relief for public education is needed for such emergency purposes as the following:

1. To open closed schools and prevent other schools from closing or from drastically shortening their terms.
2. To prevent drastic retrenchments in educational programs which will further seriously lower the quantity and quality of educational opportunity.
3. To provide for the employment at appropriate salaries of qualified teachers now unemployed who are needed

in many school systems to carry on essential phases of educational work.

4. To provide credit and other financial aid on the security of delinquent property taxes and frozen school funds in closed banks to make possible the payment of salaries and other obligations now in arrears.

5. To provide funds for the repair and construction of school buildings.

6. To provide funds to assist the states in the maintenance of a foundation program of public education in every community during the emergency.

7. To secure further liberalization of federal emergency acts through which relief is now being given.

Child Labor Day Will Be Held January 27-29

Following its custom of nearly thirty years, the National Child Labor Committee has designated the weekend of January 27 to 29 as the period for the observance of Child Labor Day.

It is estimated that the industrial codes have released 100,000 children under sixteen years of age from industry. Another 30,000 boys and girls, sixteen to eighteen years of age, have been removed from especially hazardous work. On the other hand, there are still approximately 240,000 children under sixteen years of age working in occupations not covered by codes.

The National Child Labor Committee, 419 Fourth Avenue, New York City, offers to send free of charge publications and posters for use in Child Labor Day programs.

Educational Award Goes to Walter Damrosch

The American educational award presented each year by the Associated Exhibitors of the National Education Association to someone who has contributed in an outstanding way to education, will be given to Walter J. Damrosch during the Cleveland meeting of the Department of Superintendence in February, in recognition of his successful effort to develop in schools a finer appreciation of music.

Mr. Damrosch will acknowledge the award over a nationwide hook-up of radio stations on February 27 during the annual banquet of the Associated Exhibitors.